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IN THE SUPERIOR COURT OF THE STATE OF
1
WASHINGTON
                      IN AND FOR KING COUNTY
 3
     STATE OF WASHINGTON,
                                        ) No. 96-2-15056 SEA
 4
                       Plaintiff,
                                        )
 5
                       vs.
 6
     AMERICAN TOBACCO CO.; BROWN &
 7
    WILLIAMSON TOBACCO CORP.; LIGGETT )
     & MEYERS, INC.; LORILLARD TOBACCO )
    CO., INC.; PHILIP MORRIS, INC.;
 8
    R.J. REYNOLDS TOBACCO CO.; B.A.T. )
 9
    INDUSTRIES, P.L.C.; HILL &
    KNOWLTON, INC.; THE COUNCIL FOR
    TOBACCO RESEARCH-U.S.A., INC.;
10
    TOBACCO INSTITUTE, INC.; foreign
    corporations; and unknown corpor- )
11
    corporations; and JOHN DOE 1 - 100,)
    and JANE DOE 1 - 100, individuals, )
12
13
                       Defendants.
14
                    TRANSCRIPT OF PROCEEDINGS
15
      taken before the HONORABLE GEORGE A. FINKLE, Judge,
16
       at the King County Courthouse, Seattle, Washington,
17
      beginning at 9:05 a.m., Monday, October 26, 1998.
18
19
20
21
22
    REPORTED BY:
                        Barry Fanning, RPR
                         James D. Lavielle, RPR
23
                         Official Court Reporter
                         State of Washington
24
25
03680
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03679

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03682
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03683
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1
                           INDEX
 2
     Witness Name
                               D
                                    С
                                          RD
                                                  RC
 3
     John Solow
                            3684
 4
 5
                         EXHIBITS
 6
 7
     Exhibit No.
                         Marked
                                       Admitted
 8
     5000
                                        3893
     5001
                                        3893
 9
03684
1
             Seattle, Washington, 10/26/98, 9:05 a.m.
 2
               THE COURT: Please sit down.
 3
                    CROSS-EXAMINATION (Cont.)
 4
     BY MR. WEBB:
 5
         Q
              Good morning, how are you?
        Α
 6
              Fine.
7
              Let me -- I want to pick up where we left off
8
     on Thursday at the end of the day, and we were --
     actually, if you recall, I had just completed asking
9
     you questions about a product called Premier that you
10
     had placed on this chart called safer cigarettes, do
11
12
     you recall that?
13
        Α
              Yes.
14
         Q
              Let me ask you about another product that you
15
     placed on this chart called safer cigarettes that you
16
     had written out for the jury, this is called the XA FA
     and you put dash 1978, see that?
17
18
               Yes.
               So the jury understands, remember what you
19
20
      said about that, that XA cigarette was it also called
21
      the palladium cigarette?
22
              I'm not sure I've seen this called the
23
     palladium cigarette, those are the names I saw for it.
24
      It certainly involved palladium, that is correct.
              If I called it the palladium XA, you will
25
03685
1
     know what I'm talking about?
2.
              Yes.
        Α
3
              The palladium cigarette was an experimental
 4
      cigarette product developed by Liggett & Myers in the
 5
      1970s, is that correct?
 6
         Α
              Yes.
 7
              This cigarette product involved mixing a
8
      substance called palladium right into the tobacco of
9
      the cigarette, is that correct?
10
              I think technically it was the salt of
11
     palladium, palladium nitrate, or something like that.
12
     That is for the scientists. It was a palladium
13
      compound, as I understand it.
14
              The palladium compound was placed right into
15
     the tobacco?
16
               I believe it was sprayed onto the tobacco.
        Α
17
         Q
              The tobacco that people smoked?
18
               That's my understanding, yes.
        Α
19
         Q
               The theory of palladium, is it your position
```

20 that that palladium XA cigarette, is it your position 21 that that is a safer cigarette that was not properly developed and put into the market? 22

It was my understanding that the palladium cigarette, the treated cigarette, the XA cigarette, the smoke of that, when condensed and painted on the 03686

backs of mice the way Dr. Wynder used to paint the backs of mice with untreated cigarettes, ordinary cigarettes, did not cause nearly as much -- nearly as many tumors or as much cancer, and that was not brought to market, that's my, I think, understanding in '78.

- I'll ask the question again. Is it your testimony, as you testify to this jury, is it your testimony that the palladium cigarette was a safer cigarette and should have been made available to smokers in the marketplace?
- It's my testimony that as I understand it that cigarette was safer, according to that particular test, which was how certainly that the Liggett people thought it was safer, according to that particular test, than was the way people -- that was one of the ways that people tested cigarettes, and it passed that test when others didn't, so they viewed it as a safer product. That's my understanding.
- Are you telling the jury that you believe, based on what you have seen, that it was a safer product that should have been placed into the market for people to smoke based on that animal, mouse testing you just told the jury about?
- 25 I'm simply telling you what my understanding 03687

is that this is what Liggett believed. I'm not in a position to judge whether it was safer or not safer. I'm relying on Liggett's own documents, their viewpoint, they thought they had an awfully good product, thought they had a safer product.

- Let's tell the jury. The theory of the palladium cigarette is that the palladium would act in such as way as to reduce the cancer causing properties of the cigarette smoke, is that the theory?
- I'm not sure I know what the scientific -how the palladium cigarette worked. From what I read, I'm not sure -- I don't know who knew what about the actual science of it. I know what they did know was, that if you ran the mouse skin painting test, as a general matter you got far fewer consumers and far less cancer. How it worked I'm not sure.

What the reaction between palladium and other things in the smoke were, I don't understand that, so I can't tell you what the scientific theory was. There was -- the tests were run, the mice got far fewer tumors. They did the inhalation tests and so forth, and they felt that they -- they felt they could truthfully say that this cigarette did not cause cancer when painted on the backs of mice the way other cigarettes did.

03688

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25

1 Make sure the jury understands what palladium 2 is, am I correct it is a heavy metal substance that is 3 created by extracting it from platinum, or is that 4 correct?

5 I think I have no idea where palladium comes Α 6 from.

7

8

9 10

11 12

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21 2.2

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When you put it on this chart as a safer cigarette, did you make any effort to find out whether in fact it could be ever considered a safer cigarette?

What I'm saying is that it was my opinion that Liggett felt they had a safer cigarette, Liggett felt they had something that they were prepared to take to market and market as a cigarette that didn't -- let me be precise, Liggett wanted to be very careful that they could substantiate what they said, and what they could substantiate was we believe that this cigarette doesn't cause cancer when used in the mouse skin painting test. Is that what they would have said?

Did you also see evidence as you reviewed the Liggett materials that Liggett also believed that you could never extrapolate tests on the mice to human beings? Did you see that in the materials you read?

I'm not sure. I'm trying to remember what Liggett felt. I'm trying to answer the question. 03689

don't know, as I sit here I can't recall what they said about extrapolation.

Just based on your common experience, I know you're not a scientist, but you live in the world that we live in. Just from a common sense standpoint, had you generally been aware that the scientific world does not accept testing substances on mice to be predictive of the effects that substances will have on humans?

A I don't know if -- I think you would have to ask the scientists for an accurate appraisal of that. My sense is that the scientists believed that the information that you get from animal tests of different sorts is indicative of what you might get from humans. That may not be proof, but it's indicative. We're not -- I'll just stop there. The scientists do believe you learn something from animal tests.

I didn't ask you if they learned something, I asked you whether or not the scientific community believes that you cannot extrapolate data regarding a substance on mice and extrapolate to the human being, because their biological systems are different. Isn't that correct?

That's out of my area of expertise. You will 25 03690

have to ask the scientists what the scientists believe one can learn, and how much one can learn from animal tests. I know the animal tests are common and presumably, for example, the FDA does animal tests or uses information from animal tests. But this is way outside what I know, and I'm not in a position to say what the scientific community today either does or doesn't believe about animal tests. I know Liggett felt they had something truthful they could say about this product.

As an economist, you told the jury last week that your bottom line opinion is that the failure of safer cigarettes to be in the marketplace sooner actually harmed this State because -- that's your testimony, right?

```
That is my understanding, yes.
16
17
               That's your testimony to this jury as an
      economist that the State suffered an economic injury
18
19
      because safer cigarettes were not in the marketplace
20
      sooner. Is that correct?
21
              Yes, and the information about the hazards of
22
      smoking.
23
              And so saying that, what year did -- what
24
      year should the palladium cigarette have been in the
25
      marketplace earlier in order to avoid any economic
03691
      harm to the State of Washington?
1
      A I think the palladium cigarette would have
2
 3
      been in the market in 1978, but that Liggett was
 4
      pressured by the rest of the industry, by other firms
5
      in the industry not to produce this product.
             Let's talk about that. You believe that this
 6
7
      product should have been in the market by 1978?
8
       A I think it could have been in the market by
9
      1978 or 1979, but that around that time Liggett was
      threatened and told not to produce this product.
10
        Q We'll talk about that. This substance called
11
      palladium, it does not naturally occur in tobacco. Is
12
13
      that correct? It was put in there by Liggett?
14
              That's my understanding. There may also be
15
      some amount of palladium in tobacco. I don't know the
16
      science of that. They certainly were adding palladium
     nitrate to cigarettes. That's how the process worked,
17
18
      as I understand it.
19
           Did you learn in reaching your opinion about
20
     whether this is a safer cigarette, did you learn that
      it is toxic to humans if ingested in certain
21
22
      quantities? Did you see any evidence of that?
             No, not particularly. I don't doubt it.
23
      Lots of things are toxic for people if ingested in
24
25
      large enough quantities.
03692
1
              Did you look into that issue?
2
              No, what I looked into was what Liggett felt
         Α
3
      about that issue. I think I said last week it
      appeared to me that Liggett took that issue quite
 4
 5
      seriously. Liggett did tests to see if -- Liggett was
      concerned that maybe the palladium itself would be
 6
 7
     harmful. They did inhalation studies, they had the
8
     mice breathe the smoke from the cigarettes for years,
9
      two years, they could find no trace of palladium in
10
      the mice.
11
               They did some other investigation of the
12
      injuries of the health of palladium workers, and
13
      Liggett was seriously concerned about that issue, and
14
      nonetheless felt that there was no -- there was not a
15
     risk there.
16
              When you say Liggett, so I understand, you
17
      did read the Congressional testimony under oath of the
18
      president of Liggett when he told Congress --
19
              MR. FERGUSON: Objection, hearsay.
20
              THE COURT: Sustained.
21
     BY MR. WEBB:
            You have relied upon hearsay information that
22
23
      you picked up from reading what is in documents, is
      that correct, that you are relying upon in testifying
24
      to this jury?
25
03693
```

```
I don't know. I've tried not to testify
 1
 2
      about things I've been told not to mention to the
 3
      jury.
 4
               Did you --
        Q
 5
        Α
               This hearsay business is a legal issue which
 6
      I don't fully grasp.
 7
               Did you read the Congressional testimony
 8
      given by the president of the Liggett on the issue as
9
      to whether or not he believed this was a safer
10
      cigarette? Did you read his testimony? That's my
11
      question.
12
               I may have, yes, I think I did.
13
               And did you take what he told Congress into
14
      consideration when you tell this jury that Liggett
15
      believed it was a safer cigarette?
16
               I think to some extent I do, yes.
               Did you -- do you recall when you read over
17
      his testimony, that the president of Liggett told
18
19
      Congress that he did not believe this was a safer
20
      cigarette?
21
               I may have seen that.
         Α
22
               Did you disregard his testimony?
23
              No, I weighed it in the balance with
24
      everything else I read, including the testimony of
25
      people who suggested that they thought that perhaps he
03694
      was being less than truthful.
1
             As an expert to this jury, you have actually
 2
 3
      weighed credibility of what one person said versus
 4
      what another person said about the cigarette, then you
 5
      made a value judgment as to their credibility?
 6
               No.
 7
               I thought you just told me that you weighed
      what the president said to Congress with what other
8
9
      people in Liggett said about the cigarette and
      concluded it was a safer product?
10
11
               I have to look at all the documents that are
      available, and seems to me that the documents indicate
12
13
      that they were prepared to go ahead with this product.
14
      In fact, the president of Liggett seemed to be very
15
     much in favor of going ahead with this product. In
16
      fact, when the issue of the FTC came up with this
      product, and the concern was that maybe the FTC
17
18
      wouldn't let them make health claims, the president of
19
      the company said, let's go ahead and make the claims,
20
      I don't think the FTC can stop us if we're telling the
21
      truth. He seemed in the documents to be very much in
22
      favor of going ahead with this product. He was
23
      pushing very hard for this product.
24
               Did you ignore his Congressional testimony?
25
               No, I didn't. It seems that his
03695
      Congressional testimony is somewhat inconsistent with
1
 2
      what he said on paper inside the company.
 3
              You made a credibility judgment with his
 4
      Congressional testimony?
               I didn't. I think that Mr. Meyer did -- made
 5
 6
      a statement about the credibility of his testimony.
 7
      look at all of it put together as best I can, and
 8
      including the deposition of Larry Meyer, and so forth.
 9
               I think the jury will get to hear from those
10
      people themselves, but when you look at the whole
11
      picture, when you put the whole thing together, it
```

seemed to indicate that they felt that they had a product, a safer product, that they took the health risk seriously, they took the telling the truth issue seriously, and that the reason why they chose not to produce the product is they were threatened with annihilation.

- Q Isn't the reason Liggett decided not to produce the product because Liggett came to the conclusion that it was not a safer product because the palladium might actually cause harm to smokers? Isn't that what happened?
- 23 A That's not my understanding of what happened, 24 no.
- Q In preparing for your testimony, did you at 03696

least review evidence that the public health community had expressed concern that if you put palladium into tobacco that the palladium may seep into the smoke and be toxic to humans? Did you see evidence of that?

- A I'm not sure I saw that from the public health community. I know Liggett was quite concerned about that and wanted to take that issue seriously, and took that issue seriously, and they were -- as a result of their tests felt that the level of palladium being used was sufficiently low that it was not showing up in the animals.
- Q Let's talk about that. Were you here when Dr. Burns, the first witness in this case, explained to this jury that when a cigarette company tries to develop a cigarette product that will address health concerns, and when it starts to change the composition of the smoke by adding something or taking something out, that the first thing the cigarette company had better be sure of is that it's not actually creating a more dangerous product by tampering with the product. Did you hear that testimony?
- A I've been here a long time, but no, I haven't heard Dr. Burns' testimony. I wasn't here when Dr. Burns testified.
- Q I thought you were here. 03697
 - A No, that would have been a month or three weeks of my time. I haven't got that much time. I wasn't here when Dr. Burns testified.
 - Q Does it make common sense to you as an economist that if a cigarette company is trying to develop a safer product, and it starts to add things into the tobacco, that it needs to be careful not to create a more dangerous product. Would you agree with that?
 - A Makes sense to me, yes.
 - Q In connection with this product, specifically the palladium cigarette, in preparing for your testimony were you shown documents by the State that indicated to you that the palladium cigarette may actually be a more dangerous product because the palladium cigarette actually increased the presence of carcinogen called nitrosamines?
 - A My understanding of that from the documents that I was provided was that the -- again, that Liggett was concerned about the fact because they were adding palladium nitrate to the cigarette that would raise the level, again, the science of it I'm not

```
positive, but either nitrosamines or nitrous oxide,
23
24
      something along those lines, and they responded by
25
      using a filter to bring those down to the same --
03698
      they added one compound, it was beneficial one way but
1
2
      raised something else, so they added a filter to
      offset that. That was my understanding, again, it was
 3
 4
      they were concerned about doing this properly and
 5
      recognizing all the things that they were doing.
 6
               I'll show you a document that's in evidence,
 7
      Defendants' Exhibit DA241, and ask you to examine it
      and I'll put it on the screen.
 8
 9
               Did you have an opportunity to review this
      document before you testified, sir?
10
11
12
               Look at it together.
               You will see, if I focus in on it, you can
13
      see this is a document, it's a Philip Morris document
14
15
      prepared by F. A. Reznick sent to Mr. Clifford
16
      Goldsmith, see that?
17
               Yes.
         Α
18
               Do you know who those people are?
19
               I think I know who Mr. Goldsmith is, I'm not
         Α
      quite sure I know who Mr. Reznick is.
20
21
             Who is Mr. Goldsmith?
22
              I think he is a high level executive of
23
      Philip Morris.
              This is dated November 1978, see that?
24
25
        Α
              Yes.
03699
              Read what this says, it says the LM -- that
1
 2
      means Liggett & Myers, is that correct?
 3
 4
               -- patent on the addition of palladium to
      tobacco, see that?
 5
 6
               Yes.
 7
               Now, just so the jury understands the
      reference to the Liggett & Myers patent, Liggett &
 8
9
      Myers actually went out and filed a patent on the
10
      palladium XA cigarette, is that correct?
11
              That's correct.
12
              That meant other people could get access to
13
      the patent and analyze what people were trying to do
      with the palladium cigarette, is that correct?
14
15
             Other people at that point were alerted to
16
      what Liggett -- what research they had and what they
17
      had produced and patented, that is correct.
18
             This document describes the Liggett & Myers
19
      patent on the addition of palladium to tobacco
20
      incorporated in cigarette is of no practical value for
      the following reasons: Number one, palladium alone is
21
22
      not effective. The cigarette smoke condensate
23
      produced by the addition of palladium alone to the
24
      tobacco was not different from a control cigarette on
25
      mouse skin painting tests. See that?
03700
 1
         Α
 2
               And did you also see evidence that what is
      set forth there is true, that when Liggett tested
 3
 4
      palladium alone it did not have any effect of reduce
 5
      -- strike the question.
 6
               It did not have any beneficial effect in
      reducing the cancer tumors any more than compared to
```

8 conventional cigarettes? 9 A I'm not sure I saw that. They may have found 10 that, I'm not sure I saw that. 11 See what else this document says. Palladium plus sodium nitrate is no more 12 13 effective than sodium nitrate alone. See that? 14 15 Did you become aware that what Liggett did 16 was actually add to the cigarette a substance called 17 palladium along with another chemical called sodium 18 nitrate, is that correct? 19 That's not my understanding, but again, they 20 were dancing on the very edge of what I understand 21 about science. My recollection is it was palladium 22 nitrate plus sodium nitrate -- yes, I think it was 23 palladium nitrate, not straight palladium, but again I'm not a chemist, it's been a long time since 24 25 chemistry. 03701 1 You generally became aware whether it was palladium or palladium nitrate was combined with 2 3 sodium nitrate, is that correct? I believe so, I think that's my recollection, 4 5 yes. 6 It says the cigarette containing palladium 7 plus a three percent sodium nitrate showed an 89 percent reduction in tumor incidents on mouse skin 8 painting tests, however the addition of only sodium 9 nitrate by other experimenters have shown similar 10 11 results, and they cite Hoffmann and Wynder with an 8.3 12 percent sodium nitrate and 84 percent reduction in tumor incidents, and cite another study by Stanton 13 14 Wells 7.7 percent sodium nitrate, 66 percent reduction in tumor incidents. See that? 15 16 Α Yes. 17 Is that consistent with what the evidence 18 establishes when you look at the Liggett document? This is the first time I've seen that. 19 20 See what it says here, the addition of sodium 21 nitrate adds oxides of nitrogen to smoke, see that? 22 23 The addition of these quantities of sodium 24 nitrate to cigarette tobacco produces large amounts of 25 oxides of nitrogen in the smoke which is completely 03702 1 objectionable from the standpoint of animal inhalation 2 experiments, see that? 3 A Yes. 4 Did you learn that what that is referring to 5 is the fact that when you add that quantity of sodium 6 nitrate to cigarette tobacco it produces these large 7 amounts of oxides of nitrogen which then lead to the 8 production of nitrosamines, which are a carcinogen in 9 cigarette smoke? 10 No. My understanding is, as I said, was that 11 Liggett -- this is Philip Morris' view on the matter, but Liggett recognized that adding sodium nitrate 12 13 increased the nitrous oxides, and as a result used I believe it was a cellulose acetate filter to bring 14 15 those down to the same level that they would be in any other cigarette, so that they offset the impact of 16 17 having higher -- of having sodium nitrate through a 18 filter so it wouldn't be any less safe on the

dimension of nitrous oxides, but it was still safer or performed better on the dimension of causing cancer in the skin painting test.

Q One step at a time. I take it you have now learned based on reviewing Liggett documents that Liggett became aware that it was increasing the oxides of nitrogen in the smoke?

- A I think in the early stages of the design they became aware of that and figured out a way to offset that problem, so that the finished product, as I understand it, the finished product had the same level of nitrous oxides as other cigarettes once you used this filter, but they do learn in the middle of their development that this is something they had to deal with, so they found to way to deal with it.
- Q You do recognize when you increase the oxides of nitrogen that you will likely increase nitrosamines, did you learn that?
- A No, that link -- this is why when you said it caused more nitrosamines, my recollection was that it was nitrous oxide -- I don't know the link between nitrous oxide and nitrosamines. I knew that they were concerned about nitrous oxide and they had a filter -- that when they used the filter they reduced the levels of nitrous oxides to the same level of other cigarettes, and the rest of the science of it, I can't tell you.
- Q Assume the evidence will establish that when you increase oxides of nitrogen, that you thereby increase nitrosamines. I'll ask you to assume that.
 - A Okay.
- ${\tt 25}$ Q Do you think that should cause Liggett some ${\tt 03704}$

concern in producing a cigarette that increases nitrosamines in the final product?

- A If, if the evidence was that in the final product the level of nitrous oxide, nitrogen oxides were higher and therefore the level of nitrosamines would be higher, by assumption then I presume it would be something to be concerned about.
- Q Do you agree that ultimately, Dr. Solow, that you're ultimately not the person to tell this jury definitively once and for all whether this product in fact is safer or not safer than conventional cigarettes?
- A That's right, I'm relying on the documents that I've seen where Liggett felt that it had a product that was worth marketing, that it had claims that it could honestly make, it thought it could take them to the Federal Trade Commission in advance and demonstrate that they could substantiate those claims and therefore not run afoul of the FTC. And Philip Morris may have felt differently, but in a competitive market it would have been Liggett's decision on its own to go ahead or not go ahead with that project, not have Philip Morris or Brown & Williamson or someone else tell them that if they did that they would be annihilated.

1 Q My question is, are you the right person to 2 tell this jury whether this in fact would have been a 3 safer cigarette?

No, I think the doctors are in a better 4 5 position to say whether these things are a safer cigarette. I'm saying I thought Liggett -- my opinion 6 7 is Liggett felt they had a safer cigarette. Do you think Liggett people would be in a 8 9 better position than you're in to tell this jury what they actually believed? 10 11 Yes, probably. 12 Thank you. 13 Now let me go to another issue that in 14 connection with this first agreement you put on the chart here, the arrangement not to advertise on the 15 basis of health, number one, see that? 16 17 Yes. 18 Q I want to make sure you know what agreement 19 I'm talking about. 20 Yes. A This is your first agreement here? 21 22 23 In connection with that agreement, you testified last week to the jury that you believed that 24 25 an advertising dispute between Philip Morris and the 03706 1 British American Tobacco Company that took place in 2 Holland in 1983 was evidence of that collusive 3 agreement, is that correct? 4 Yes. 5 And now the British American Tobacco Company -- that's a company that is headquartered in England, 6 7 is that correct? 8 Α Yes. 9 And their business is almost exclusively in Q 10 countries other than the United States, is that 11 correct? Yes. I guess so. 12 Α 13 You told -- well, when you identified the 14 people who were present at the Plaza Hotel meeting 15 where this agreement was begun, as you said, the 16 origins of the agreement, was there any representative 17 for the British American Tobacco Company at that 18 meeting? 19 No, I don't believe so. So the jury understands, the incident which 20 21 we'll talk about here involved a cigarette called the 22 Barclay cigarette, is that correct? 23 Yes. Α 24 Let's tell the jury a little more about what 25 the Barclay cigarette was based on your preparation to 03707 1 testify here in this proceeding. 2 Barclay was a cigarette that was actually 3 developed and put into the marketplace by Brown & 4 Williamson, is that correct? 5 I believe so. That took place in January 1981, is that 6 7 correct? 8 I couldn't tell you the date it was introduced. 9 Did you look at the history of the Barclay 10 11 cigarette? A Some of it, yes. I have some understanding 12 13 of the history of the Barclay cigarette. 14 In looking at the history of the Barclay

cigarette do you recall that in the early 1980s here 15 16 in the United States that Brown & Williamson began to advertise Barclay as an ultra low tar cigarette with 17 18 only one milligram of tar, 99 percent tar free. Did you at least see some evidence of that? 19 20 Yes, I think that's my recollection. 21 As a result of Barclay advertising -- strike 22 that. 23 As a result of B&W advertising that Barclay 24 cigarette as ultra low tar, 99 percent tar free, one 25 milligram of tar, Barclay actually in the first three 03708 or four months of its sale, substantially grabbed a 1 2 good share of the market, about 1.3 percent, is that 3 correct? 4 Α I think that's more or less correct. 5 And those advertisements that were being 0 promoted by Brown & Williamson, it's your contention 6 7 that Brown & Williamson was part of this collusive 8 arrangement not to advertise on the basis of health? 9 Yes. 10 When Brown & Williamson in the early 1980s was out there advertising this Barclay cigarette as an 11 12 ultra low tar, one milligram cigarette, 99 percent tar 13 free, would you agree that they were advertising 14 making a health claim in that ad, in those ads? As I said before, I think it's fair to 15 16 conclude that some consumers might infer that was 17 better for them. 18 So if Brown & Williamson were part of this 19 collusive agreement they should not be running those kind of advertisements, should they? 20 21 I think they are pushing the limits -- by the way, by this time, by 1981, as I recall, the FTC was --22 the FTC had approved only the listing of tar and 23 nicotine content by FTC numbers, so I think to that 24 25 extent they were running the ads that they thought 03709 they could. 1 2 Well, but those kind -- they did more than 3 run the little box with the tar and nicotine levels, didn't they? They ran these headline ads, low tar, 99 4 5 percent tar free, one milligram tar, you have seen 6 those ads? 7 Α Yes, I've seen those ads. 8 Those are health claims, aren't they? 9 As I say, I think those are weak health Α 10 claims. 11 If there was a collusive agreement, they 12 shouldn't be running those kinds of ads? 13 A I'm not suggesting the collusive agreement 14 was perfect and they were not able to run any ads at 15 all that make any health claims whatsoever, I think 16 that would have been the desired goal of the industry. 17 As I said, as Dr. Calfee pointed out when the industry 18 -- when the FTC requested the companies to run their tar and nicotine content, the industry and the 19 20 cigarette advertising code administrator resisted that, but that is what they were told they should do. 21 22 So at that level only they were making -- they were 23 running ads that had those weak claims in them, which 24 may or may not have been truthful claims, but had 25 those weak claims in them.

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03710
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1 2

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Q Are you now telling us that the agreement that you put as number one was actually not, -- I thought you told us last week this was an agreement not to advertise on the basis of any health claims?
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- A That was the aim, I think, yes. These agreements, I've never suggested that these agreements were entirely 100 percent successful, but that was the aim. Certainly it changed the nature of advertising in the 1950s, in my opinion, and as we'll see there are instances in which companies had truthful health claims that they thought they could make and chose not to make them.
- Q What happened here was -- tell me if I'm correct, if you know this from preparing to testify -- my clients Philip Morris and R. J. Reynolds, another tobacco company, believed and questioned the accuracy of those Barclay ads, is that correct?
 - A Yes, I believe that is true.
- Q In fact, R. J. Reynolds and Philip Morris both went to the Federal Trade Commission and complained to the Federal Trade Commission that those ads were unfair and misleading, didn't they?
- A I think that's true. I think, as Dr. Henningfield testified, is that what Brown & Williamson actually had done was find a way to cheat
- the FTC's smoking machine very effectively, and Philip Morris and Reynolds did in fact go to the FTC and say they're cheating your machine, which is what Dr. Henningfield testified that was the game in the 1980s, to figure out ways to cheat the machine and Brown & Williamson found a way to do it very well.
- Q Call it cheating, no need to argue with you over that issue, but you were aware that Philip Morris went to the Federal Trade Commission and basically complained that this Barclay cigarette is the only cigarette that is not being measured in a fair way, is that correct?
- A Yes, I don't have any reason to doubt that. I think it would be unlikely for a company to say they are cheating the machine better than we're cheating the machine, therefore you should stop them but not stop us. No one is going to say that, but it wouldn't surprise me to say yes, they are cheating the machine, we're not.
- Q When Philip Morris got angry at Brown & Williamson and went to the Federal Trade Commission and said this Barclay cigarette is being advertised improperly, that is what you would expect competitors to do, is it not?
- A Yes, if you feel another firm is running 03712
 - deceptive advertising, I wouldn't find it anti-competitive for a firm to then complain to the FTC if they felt that was deceptive.
 - Q If Brown & Williamson felt the ads were not deceptive and insisted on the right to continue to run them, they have the right to do that, don't they, until the Federal Trade Commission tells them to stop?
 - A As I understand it, that is correct, yes.
- 9 Q That's what you told the jury you want the 10 tobacco companies to do is basically challenge the

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11 FTC, right up to the wall?
```

1 2

- A If they can substantiate their claims, then I think that they are likely to win. Hopefully they will win, hopefully the FTC is doing the job right, if they can substantiate the claims, truthful claims can be substantiated, they should go ahead and do it. I think the FTC said that, and other companies understood that, yes.
- Q Brown & Williamson was acting completely inconsistent with any kind of agreement of collusion on health claims because it was making, you called it weak health claims in ads, and it refused to stop running them, didn't it?
- A At least it was running advertisements that listed the tar and nicotine levels, and measured by
 - the FTC machine I don't think -- I don't know that there was anything untruthful about that claim as such. That's what the FTC machine did say, and Philip Morris and Reynolds were upset because they figured out that Brown & Williamson -- that Barclay had managed to cheat the machine very well, they managed to get very low readings, but they didn't think that was an accurate measurement of tar and nicotine given the way people actually smoked the cigarette. That's my understanding.
 - Q Actually what happened, isn't it, that we don't need to spend a lot of time on the history of the FTC, after Philip Morris and R. J. Reynolds complained you have seen the evidence that Federal Trade Commission took action against Brown & Williamson to try to stop the ads, is that correct?
 - A I believe, yes.
 - Q The case wound its way through the court system and eventually in 1984 the courts made the final decision that BW could no longer advertise the cigarette as a one milligram cigarette but could continue to say that they are 99 percent tar free, is that correct?
- 24 A As I sit here, I can't remember what the 25 final ruling was, but I'm willing to take your word 03714

1 for that.

- Q That type of dispute between two competitors over the other fellow's advertising, there is nothing anti-competitive about that at all, is there?
- A That all by itself going through the FTC that way, no, that's not.
- Q You came to learn that this dispute -- by the way, when there is a competitive market out there and people are competing for sales, there are frequently times if you are having aggressive competition that these competitors have disputes with each other, don't they?
- A There are a variety of the dimensions firms could have disputes, is that correct.
- Q As an economist aren't you trying to look to see if there are disputes is that an indicia, indication of competition?
- 18 A Not necessarily, depends on -- there are many 19 -- there are several dimensions we talked about along 20 which firms can compete and there are many dimensions 21 along which firms can have disputes and you have firms

-- I'll give you an example. In Latin America where 22 23 the evidence is quite clear to me that Philip Morris and British American Tobacco were price fixing and had 24 25 agreements to share the market, nonetheless, they had 03715 1 a dispute about the packaging of their brands. One of the two, I can't remember which one 2 was infringing on whom but one of the two was using a 3 box that looked too much like the other box and two of 4 5 them had a dispute about that and were upset. Yes, they had a dispute about packaging and 6 7 settling internally but at the same time it's clear the market wasn't competitive, they were fixing prices 8 in that market. So the mere fact that firms have 9 disputes is not necessarily indicative of competition 10 11 or the lack of competition. 12 But this dispute between Philip Morris and BW 13 was on the very issue that you say there was 14 a collusive agreement on? 15 Yes, I think the rest of the evidence about 16 that dispute, the part that didn't take place within the FTC proceedings but took place in letters and 17 phone calls and meetings between Brown & Williamson --18 19 sorry, between British American Tobacco and Philip 20 Morris suggests that that is consistent with the there 21 being an agreement. We'll talk about that now, talk about that so 22 the jury understands what happened. This dispute 23 between Philip Morris and Brown & Williamson was not 24 25 limited to the United States because Brown & 03716 Williamson's sister companies oversees were also 1 2 advertising this Barclay product, this cigarette as being this one milligram tar, very low tar 99 percent 3 tar free cigarette, is that correct? 4 5 That's correct. 6 You saw that this dispute between Brown & 7 Williamson and Philip Morris actually led to litigation in a number of different foreign countries, 8 9 is that correct? 10 A The only one I know of is Holland, I don't 11 know of any other countries. 12 Did you review any documents that indicated 13 that Philip Morris and Brown & Williamson actually 14 ended up -- strike that. 15 Did you see documents that indicated to you 16 that Philip Morris and Brown & Williamson or Brown & 17 Williamson's sister companies ended up in litigation 18 in Belgium, Holland, Germany, Switzerland and Norway? 19 No, the only one I say anything about that I 20 can recall was Holland. 21 Talk about Holland then. Q 22 Okay. 23 The episode in Holland was a dispute over 24 this same Barclay cigarette, is that correct? 25 Goes a little beyond that, it's also a 03717 dispute about Philip Morris' advertising with regard 1 to that. It went well beyond just the Barclay 2 3 cigarette there was a dispute about Philip Morris' 4 advertising and the Barclay cigarette. 5 The dispute involved the Barclay cigarette 6 start with that, is that correct?

```
7
               Yes.
 8
               What it involved was an advertisement that
         Q
9
      Philip Morris ran in a Holland newspaper in September
10
      of 1983, is that correct?
              That's right.
11
12
               What so the jury understands, Philip Morris
      ran an advertisement in a Holland newspaper, is that
13
14
      correct?
15
              I would in say in a Dutch newspaper.
        Α
16
              Call it a Dutch newspaper?
17
              Yes.
18
              That Philip Morris paid for that
     advertisement, is that correct, to your understanding?
19
20
               I would assume they paid for it.
21
              What Philip Morris did was that it reprinted
22
      an attack on the Barclay cigarette that had been made
23
      by an anti-smoking group that had ran in the newspaper
      the day before in Dutch?
2.4
25
              In Dutch and in a Dutch newspaper.
03718
1
              Is that correct?
            In the Dutch language and in a Dutch
 2
      newspaper, yes, I believe that's correct.
 3
 4
       Q Now the British American Tobacco Company is a
 5
      sister company to Brown & Williamson, is that correct?
 6
 7
              And the British American Tobacco Company
8
      immediately took legal action against Philip Morris on
      the grounds that Philip Morris' advertisement in those
9
10
      Dutch newspapers actually violated a Dutch law, is
11
      that correct?
            I understand they filed such a claim, yes.
12
13
               And they claimed that under this Dutch law
      that Philip Morris did not have the right to run that
14
      type of comparison ad, is that correct?
15
16
               I don't know all details what they claim, but
17
      they claimed that what Philip Morris had done was a
18
      violation of Dutch law?
19
              And Philip Morris agreed not to publish the
20
      advertisement again but refused to run a retraction,
21
      is that what happened?
22
              Yes.
23
              Now, by the way, if it turned out that Philip
24
      Morris' ad in Holland and the Dutch newspaper turned
25
      out to in fact be a violation of the unique laws of
03719
1
     Holland, it would be okay for Philip Morris to stop
      running the ads, wouldn't it?
3
              Yes, I suppose -- no, you wonder why they
      would have run in the first place if it was in
4
 5
      violation of Dutch law.
 6
            Do economists make mistakes?
 7
             Sure.
 8
             Do you think tobacco companies might make
9
     mistakes sometimes?
10
              Sure.
              It would not be an anti-competitive act if
11
12
      Philip Morris decided not to rerun the ad again
      because it became concerned about the parameters of
13
14
      Dutch law, would it?
15
     A No, if that's all that had happened, no, it
16
      wouldn't.
17
             And the document that you -- I'll show you
```

one of the documents that you showed the jury about 18 19 this episode. 20 This document is in evidence as State's 21 Exhibit 2590, you were shown by Mr. Ferguson, I'll show 22 it to you so you know what we're talking about. 23 Yes. This is a document on the letterhead of the 24 25 British American Tobacco Company, see that? 03720 1 Yes. Α 2 Dated September 20, 1983, see that? 3 Α And you testified about this document during 4 5 your direct examination by Mr. Ferguson. 6 Do you recall that? 7 Α Yes. 8 This actually talks about -- the heading on Q 9 the document is relations with Infotab, National 10 Manufacturers Association NMAS, see that? 11 Α Yes. So the jury understands the heading on the 12 memo, this British American Tobacco Company document 13 is -- it's actually an internal memo, up here it's a 14 15 letter to I think that's all number ones of 16 the operating companies, is that correct? 17 That's my understanding. 18 That means the British America Tobacco Company is communicating with some level of management 19 inside of its company? 20 21 Yes, number ones of the subsidiaries of 22 British American Tobacco, that is right. 23 What this document reflects, if we actually 24 read it -- by the way, says Infotab was an international trade association for tobacco companies, 25 03721 1 is that correct? 2 A Something like that was my understanding, 3 4 And you told the jury there is nothing wrong 5 or improper about companies being members of trade associations, is there? 6 7 Not in and of itself, depends on what goes on 8 in the trade association. 9 Almost every industry has a trade 10 association, is that correct? 11 Α Yes. 12 Now what this document says is that -- it 13 recounts the dispute between Philip Morris and the 14 British American Tobacco Company over this ad, is that 15 correct? 16 Yes. A And --17 Q 18 Α At least somewhat. 19 Go through -- we don't want to mistake --20 says October 2 in Holland the Philip Morris company, 21 and in that country, published an advertisement, 22 appendix A attached? 23 MR. FERGUSON: You said October 2. MR. WEBB: I'll reread, apologize, instead of 24 25 September 2, apologize. 03722 1 Says on the second of September, see that? 2 Α Yes.

```
3
               In Holland the Philip Morris company in that
 4
      country published an advertisement, dash, appendix A
 5
      attached, see that?
 6
              Yes.
 7
               I think you showed the jury or talked about
8
      appendix A when Mr. Ferguson was asking you questions,
 9
      is that correct?
10
               I can't recall whether we showed them
11
      appendix A or not.
12
              You recall seeing the document?
13
               Appendix A shows the ad, is that correct?
14
               It's my understanding.
15
               The advertisement had two inch headlines
      saying a message about which smokers must not think
16
17
      too lightly, there followed an extraction from an
18
      article the previous day in the same newspaper, a
      translation of this article is attached as appendix B.
19
2.0
               Did you see appendix B when you read the
21
      document?
22
        Α
              Yes. A is in Dutch, I don't speak Dutch.
              B was in English?
23
24
         Α
              B is in English, that's right.
25
               This advertisement is the first occasion of
03723
1
      which we are aware when a competitor has raised the
      health issue to gain competitive advantage, see that?
3
               Yes.
 4
               And quoted and thereby endorsed a report of
 5
      an anti-smoking lobby, in this instance the Dutch
 6
      Association of Public Health and Smoking to attack
 7
      another company in the industry, see that?
8
              Yes.
         Α
9
               The memo goes on to say our lawyers in
      Holland immediately advised the Philip Morris company
10
      that they were breaking the Dutch law in three ways,
11
12
      namely, using comparative advertising, using
13
      misleading advertising, and infringing the trade
14
      descriptions act by mentioning Barclay, i.e., a brand
15
      that was not theirs, see that?
16
        Α
               Yes.
17
               Did you make any effort to find out whether
      or not Philip Morris in fact violated a law in Holland
18
19
      called the trade descriptions act?
20
               No.
21
               It says, the lawyer further asked Philip
22
      Morris to reply in writing by 12:00 p.m., fifth of
      September to the effect that they would immediately
23
24
      stop this advertising or any variance of it in any
25
      medium.
03724
1
               Number two, they will insert a retraction in
 2
      all the media in which the original advertisement was
 3
      placed such a retraction to be published by 12:00 p.m.,
 4
      fifth of September, 1983, see that?
 5
         Α
 6
               Our lawyers further advise Philip Morris that
 7
      in default of such by them we would take immediate
 8
      steps by legal means to obtain a full retraction of
 9
      the statement and an injunction preventing such
10
      statements in the future.
               The Philip Morris company in Holland agreed
11
12
     not to publish the advertisement again but they did
13
      not agree to publish a retraction.
```

As a result on nine September legal 14 15 proceedings were instituted by our company in Holland for a hearing on 15 September. A decision is expected 16 17 from the court not later than the 29 September, see 18 that? 19 Α Yes. Now there is -- so far there is nothing about 20 21 the fact that Philip Morris and B&W are now in this 22 argument over the legality of ad that would be 23 anti-competitive, is that fair to say? 24 No, I disagree with that, go back to the 25 first page. 03725 Tell me what is anti-competitive. 1 2 Α Go back to the first page, I'll read you the 3 language. 4 Where? Q 5 Right there, that's perfect. This Α advertisement is the first occasion of which we are 6 7 aware when a competitor has raised the health issue to gain competitive advantage. 8 9 To me that is indicative of the main complaint here is here we have an advertisement that 10 11 uses the health issue to gain a competitive advantage 12 and this is the first time in 1983 that we're aware 13 that anyone, a competitor has ever done that. 14 You know that's not true? 15 I know that's not true, that's an Α overstatement. But it's certainly true that the 16 17 number one thing in the document is the concern that a 18 competitor is using the health issue to gain competitive advantage and if you go back and look at 19 20 the telex which was attached to this, the claim there from the CEO or the chairman of the board of BAT 21 Industries, the parent company of BATCo and Brown & 22 Williamson, is that the main concern is how can you 23 24 make a mockery of industry cooperation on this issue 25 and things like that. 03726 1 They did in fact say, they did in fact say 2 they felt this was illegal and they instituted proceedings but the number one issue raised in 3 everything that you read is that this is the first 4 5 occasion of which we're aware when a competitor has 6 raised a health issue to gain competitive advantage in 7 a competitive market. I would expect to see 8 competitors raising the issues truthfully to gain 9 competitive advantage all the time, that's what 10 competition is about, gaining competitive advantage. And the fact is you have seen the ads where 11 12 these tobacco companies were raising health issues, 13 the ads I showed you last week? 14 Yes, I've certainly seen those ads. I think 15 if you look at those ads in comparison with the ads 16 that were running before that time you would see they 17 backed off trying to gain competitive advantage on the basis of health and if you look at the trade press of 18 19 the time you will see a big change in -- big change 20 toward doing a lot of less of using the health issue

http://legacy.library.ucsf.@du/tid/dritq97/a00/pdfidustrydocuments.ucsf.edu/docs/xkgl0001

The movement as a result of this meeting was

You told us now that this language -- I want

to gain competitive advantage.

clearly in the opposite direction.

21

22

23 24

03727 1 Α Okay. It says here -- I'm reading the paragraph --3 says on nine September, see that? 4 Yes. The chairman of BAT Industries sent a telex 5 6 to Mr. George Weissman, Chief Executive of Philip 7 Morris in New York, strongly protesting about the 8 events in Holland. He further pointed out that Philip 9 Morris, Philip Morris' action made a mockery of industry cooperation on smoking and health issues and 10 asked for a retraction of the advertisement and a 11 12 guarantee that it would not be repeated, see that? 13 Α Yes. You told the jury when Mr. Ferguson was 14 asking you questions that that language in that telex 15 where the chairman of BAT Industries told Mr. Weissman 16 17 that Philip Morris' action made a mockery of industry 18 cooperation, you told the jury that that language you believe is evidence of cooperation regarding this 19 20 collusion to not advertise health claims, is that 21 correct? Yes, I think it's evidence of that. 22 Α 23 What you didn't tell the jury is this same 24 very document explains what the word cooperation 25 means, doesn't it? 03728 I think that it's clear from that use of the 1 2 word and the other discussion that went on in the 3 phone call, and so on, makes it clear at least tells me that's what I think cooperation means. 4 5 Did you read the whole document? Q 6 7 Doesn't the document on its face explain that the cooperation that is being referred to is the 8 9 cooperation between these companies at this trade 10 association? 11 I guess I don't see that. Α 12 You don't see that? 13 I think it's much more consistent with the 14 notion that it makes a mockery of this cooperation to 15 not take competitive advantage of health claims, that 16 was the number one thing, and then you as I said, there 17 is much more to this as it spun out, phone calls were 18 made and people said the CEO of Philip Morris says he 19 understands it's important we agree, that we all hang 20 together on this. When you look at the whole package, 21 that is what the cooperation is, not the cooperation 22 within the trade association but the cooperation not 23 to take competitive advantage of each other. 24 Do you mind answering my question? 25 That's my understanding of what that language 03729 1 means. My question was did you fail to tell this 2 jury that in this very same document, this document on 3 4 its face sets forth that the cooperation that is being 5 talked about is BATCo doesn't want to cooperate with 6 Philip Morris anymore in this trade association, does 7 it say that in the document? 8 I think what it says is BATCo, as a result of 9 this failure of cooperation, which in my opinion is a

25

to go to the telex.

```
10
      failure, as I said, a failure of cooperation on not
11
      taking advantage of each other on health claims. As a
      result of that, BATCo says if Philip Morris is going
12
13
      to fight this way, we're not going to have anything to
      do with them anymore, and that was a way of getting
14
15
      back at them.
               By the way, did you agree that in the
16
17
      cooperation being referred there is simply BATCo
18
      saying if they are going to run ads like that, we're
19
      not going to work with them anymore inside the trade
20
      association, that's not anti-competitive, is it?
               That in itself would not be anti-competitive,
21
      it's the agreement, the cooperation that's -- of which
2.2
23
      a mockery is being made, that's anti-competitive
24
      behavior that would have been a way of policing or
25
      enforcing the agreement, the cooperation.
03730
               Do you think it's a little unfair to this
1
      jury for you to point out this phrase of mockery of
 3
      industry cooperation, and not show the jury if the
      document itself actually describes what cooperation is
 4
 5
      being referred to?
 6
               MR. FERGUSON: Objection, argumentative.
 7
               THE COURT: Sustained.
 8
     BY MR. WEBB:
9
              Go down, on the same page they describe -- he
10
      describes exactly the cooperation they are talking
      about, doesn't he?
11
              Not in my opinion, but --
12
13
         Q
              Let's read it.
14
        Α
               Okay.
15
              He says in this memo to all -- this is to the
        Q
16
      BATCo number ones, right?
17
        A
              Yes.
18
        Q
              That's what this memo is?
19
        Α
              Yes.
20
               Remember, this whole memo, the entire memo is
      telling the number ones what their relationship is
21
22
      going to continue to be with this trade association,
23
      at least that's what the heading says, right?
24
              Yes.
25
               So this memo is being written to the number
03731
 1
      ones telling them what their relationship will be in
 2
      the future with this trade association?
 3
               Yes.
        Α
               And right here, on nine September, because
 4
 5
      the primary purpose of Infotab -- that's the trade
 6
      association, right?
 7
        Α
               Yes.
 8
               Is to provide a forum on smoking and health
9
      issues and to establish the industry's position and
10
      credibility in this area.
11
               The chairman also sent a telex to Mr. Andrew
12
      Reed, chairman of Imperial Tobacco Company in London
13
      who is this year's chairman of Infotab, see that?
14
        Α
               Yes.
15
               The telex read as follows, as chairman of
16
      Infotab regrettably has to inform you that in view of
17
      Philip Morris' advertisement in the Dutch papers on
      second September, BAT has decided to withdraw from all
18
19
      cooperation with Infotab for the time being.
20
               See that?
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21 Α Yes. 22 Doesn't that make very clear that the 23 reference up there to the word cooperation has nothing 24 to do with this collusive agreement and all it is 25 referring to is the cooperation in the trade -- at 03732 least that's what the document says on its face? 1 2 No, the document used the word cooperation in 3 two places when you look at the whole picture, not 4 just the document but also the phone call between Mr. 5 Bruell of BAT Industries and Mr. Cullman I guess it was of Philip Morris and the rest of this I think that 6 7 they are using the word cooperation in two different places certainly but I think it seems clear to me that 8 9 what is at stake here is using health claims to gain 10 comparative advantage and that was the big concern and that this withdrawal from Infotab was a way of getting 11 back at Philip Morris because BAT Industries was very 12 13 upset that Philip Morris had done that to them, had 14 used an anti-smoking group's statement about how Barclay's measurements were inaccurate to gain 15 16 comparative advantage -- competitive advantage, excuse 17 18 When you told the jury last week that the use 19 of cooperation up here was referring to the collusive 20 agreement but then down here it actually explains on 21 the letter that the cooperation is in the trade association, you at least -- in fairness you should 22 have at least showed the jury that language? 23 24 I think they have used the cooperation in two 25 places that --03733 1 Do you think in fairness you should have 2 showed them the language? MR. FERGUSON: Objection, argumentative. 3 THE COURT: Sustained. 4 5 BY MR. WEBB: 6 Let me go on to the next, I'm going to leave 7 agreement number one and move to agreement number two. 8 Are you with me? 9 Yes. 10 You wrote this on the chart as being -- this 11 is a collusive -- I use the word collusive because that's your word, right? 12 13 It's a collusive arrangement to mislead the 14 public about smoking and health and you wrote the word 15 1953 Plaza, do you remember that? 16 Yes. 17 This is what you say is the second collusive agreement that was entered into between my client and 18 19 other tobacco companies at the 1953 Plaza Hotel 20 meeting, is that correct? 21 Yes. 22 So I'll ask you questions about that 23 agreement. 24 Okay. 25 When Mr. Ferguson pointed to this agreement 03734 1 here and he asked you a question as to what that was 2 referring to, I'm going -- I think I'm going to say it 3 correct. If I'm wrong, tell me. 4 You testified that at the Plaza Hotel meeting 5 that the industry came up with the idea of having a

scientific research organization called the Tobacco 6 7 Industry Research Committee that was supposed to do 8 legitimate scientific research on smoking and health 9 You testify then that in your opinion the 10 11 purpose of the Tobacco Industry Research Committee was 12 only to be a public relations front for the tobacco 13 industry and was never intended to get at the truth 14 regarding smoking and health issues. 15 Is that your testimony? 16 More or less, yes. 17 What you told the jury is that this -- well, you actually -- when you drew your cartel -- this is 18 19 your wheel chart where you drew --20 Yes. 21 Drew out this, all the totality of the 22 collusiveness called the cartel, is that correct? 2.3 24 You put this research organization, you wrote 25 TIRC, is that correct? 03735 1 So the jury understands, those are the 2 3 letters -- TIRC stands for the tobacco industry 4 research committee, is that correct? 5 6 You put them right at the center of this 7 collusion? 8 Α 9 Now is it your opinion as an economist that 10 this organization, TIRC, was part of this collusive 11 agreement and cartel all way from 1953 up to when, 12 today? 13 Α First of all, it changed names. I wasn't trying to be -- you wrote CTR. TIRC 14 later changed its name to CTR? 15 16 Right. A 17 When it was formed it was called TIRC? Q 18 Right. Α 19 Does it matter what I called it? 20 So long as we're understanding what we're 21 talking about, not particularly. 22 It's the same organization? 23 That's my understanding. 24 At one time called the Tobacco Industry 25 Research Committee, later changed the name to the 03736 1 Council for Tobacco Research, is that correct? 2 I think that's right. 3 My question, is that organization the we'll 4 called it TIRC dash CTR, is it your testimony that it 5 was part of, this TIRC was part of this collusive agreement and cartel from 1954 when it was created up 6 7 to today? 8 I'm not sure I could date precisely when TIRC 9 became -- give you precise dates. I do believe over the course of this time it pretty quickly became a 10 11 piece of the cartel, was used by the firms to mislead the public, was used by the firms as a way to 12 13 communicate among themselves about, for example, 14 agreement number one, we had up there at least on one 15 occasion one firm used TIRC to tell another company to 16 stop making health claims, as a matter of fact, I think

17 it was Philip Morris that did that and as a general matter to be an industry shield to try to deflect 18 19 scientific understanding of the smoking and health 20 issue. That is my understanding, yes. Exactly what the dates are is kind of hard to say, so. 21 22 I thought you're the one that dated, it was TIRC was formed as a result of the Plaza Hotel 23 24 meeting, is that correct? 25 Α Yes. 03737 1 I thought you wrote on the chart, you wrote 2 down Plaza Hotel? Yes, I think it had its genesis in the Plaza 3 Hotel meeting. 4 5 Q Has TIRC continued to be in the center of 6 this cartel since then, for a long time since then?

quality of science.

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Yes. Before you reached that conclusion and told the jury about it, the conclusion being that TIRC was a public relation front for the tobacco industry and was never intended to get to the truth regarding smoking and health issues. Before you reached that fairly broad conclusion, have you at least examined the scientific research that has been done by TIRC during the past 45 years?

A little bit, although, again I'm not generally in a position to evaluate the science. I can read scientific papers but I'm not in a position to fully understand them.

- But have you actually examined the scientific research that has been done during the past 45 years before you reached your opinion?
- Not particularly, no. I'm not -- you could put it in front of me and I didn't really -- I'm an economist, I can't tell you what the science means.

03738 1 I've reviewed the documents in which firms, and lawyers for firms talk about their view of TIRC and 2 CTR but I'm not in a position to be able to evaluate 3

> I'm not asking you to evaluate the quality of science.

Before you reached your final opinion that this TIRC was nothing more than a public relations front for the tobacco industry, never intended to do legitimate smoking and health scientific research, don't you think you would look at what they had done to see if it's true?

What I'm trying to say is I could read reports of the TIRC and not know whether those -- I'm going to leave that to the doctors to whether these were really things that helped people to understand the link between smoking and health.

What I will say is that there are any number of documents in which members of the industry, lawyers for the industry, companies and so forth, say that TIRC was not doing the right sort of research or enough of the right sort of research, that they had -they were not credible and where the lawyers for the companies lay out precisely why TIRC was arranged the way it was and how it was used to mislead the public

1 and how it was used to shield, to shield results that were favorable -- that were unfavorable to the results from results that were favorable to the industry and so forth.

I'm relying on the statements by the industry lawyers and scientists rather than trying to evaluate that science myself, I'm not in a position to evaluate the science myself.

- Q Would you agree with me as an economist that it's more important to look at what people do as opposed to what people say they are going to do?
- A You have to understand that you have to be able to make a judgment about what people are actually doing. I'm saying I'm not in a position to make that judgment, have to leave it to the doctors to say what people did or didn't do and whether this was good science or not.

I'm not the person to make that judgment, I'm simply relying on what the industry said if was doing with $\ensuremath{\mathtt{TIRC}}$

Q All I'm saying is that -- you read what people say, all I'm asking is don't you think you at least ought to look and see what CTR actually did before you reach this conclusion that it was a front, a sham?

- A That language, that sort of language comes from people within the industry. There are people within the industry who say it was a front. The lawyers, Janet Brown, for example, explained how it was set up to be a front. Somebody needs to look at what they did, but I'm not the person to do that because if you put two papers down in front of me or a paper down in front of me that was done by CTR and say did this explain the link between smoking and health, I can't tell you that because I don't know enough about the science. I'm relying on the large quantity of industry documents where people in the industry recognized this did it.
- Q Did someone prevent you from actually looking at the actual scientific research conducted by TIRC before you reached the final opinions on the collusive agreement?
- A No, I chose not to look at actual scientific research, I know it's something I can't evaluate.
- Q If you are not a scientist, if you look at articles and saw that this organization actually did research that concluded that smoking causes disease, directly against the interest of the industry, at least that would tell you that maybe you were wrong about this, wouldn't it?

A If I could understand what that research meant and whether it was useful or not, sure, but again there is just vast quantities of statements by the industry, by the industry's lawyers and so forth saying this was designed to be a front.

It was, as I said, Philip Morris when
American Tobacco -- sorry, US Tobacco sent the letter
to the doctors making a comparative health claim,
Philip Morris wrote, CEO for Philip Morris wrote to
the head of TIRC and said that this US Tobacco health
claim, this Dear Doctor letter is -- given I can't
remember the exact language but along the lines of

making a mockery of the industry cooperation that we 13 14 have been trying to establish for the last 40 years 15 and that -- can't you please write to the president of 16 US Tobacco and tell him to stop that, to me is not indicative of using TIRC to do science, it's 17 18 indicative of me of using TIRC as a conduit for Philip Morris to tell US Tobacco to stop cheating on the 19 20 agreement which they seem to have been trying to 21 develop over the last 40 years, that sort of set this 22 straightforward on its face. 23 I can evaluate that as an economist, I can't 24

evaluate a paper on the science of smoking, I don't know enough about it.

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- As an economist if you actually see evidence that CTR was not a front, that it actually did a lot research, wouldn't that help you reach a different conclusion on number two?
 - It would depend.
 - Would it help you?
- Α It would certainly depend but I'm not the person to judge whether - how much research was valuable along what line, I'm simply relying on, as I say, the vast quantity of statements by people in the industry who explained the purpose of TIRC as a public relations shield for the industry and the way it was used to shield the science, to split off the science that was not favorable from the industry's standpoint and the science that was and to hide the stuff unfavorable behind legal privilege, all that sort of stuff that I can understand as an economist.

It's up to the scientist to tell you how much of the money they spent was on research that really helped to establish the link between smoking and health and had any, if any, impact on designing a safer product.

- You don't mind telling the jury here what you do know about what CTR did, do you?
- 25 No.

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- If you had wanted to find out before you reached the opinion that you told the jury about that it was just a front, one thing you could have done is look at the surgeon general reports that have been prepared over the years to see if the surgeon general believed that the TIRC was doing meaningful research, couldn't you?
- I suppose, depends on what level of understanding of the science, what level -- excuse me, what level of understanding of the science was required.
- If you saw, for example, that the surgeon Q general of the United States frequently cited research done by TIRC to support the conclusions reached by the surgeon general that smoking is dangerous to health, at least that would help you maybe come to a different conclusion that maybe this wasn't just a front, wouldn't it help you do that?
- You would have to put that in the context of all of the research that TIRC was doing and I'll leave it at that, have to put that in the context of all research TIRC was doing and I guess I really need the scientist to tell me what fraction of it was valuable

24 and what fraction wasn't, but I keep coming back to 25 the document. 03744 1 I know you don't mind talking about, talking about what CTR actually did, do you? 2 3 A I'm not in a position to evaluate what fraction of the work was beneficial to smoking and 4 5 health and what wasn't. 6 We'll try to do that to see if you change 7 your opinion before you leave here. 8 I, last night, drew -- let me -- before you 9 reached your conclusion that this TIRC CTR is just a front did you at least try to understand how it was 10 structured? 11 12 I have a rough idea of how it was structured, 13 yes. I drew this out on a chart so I wouldn't have 14 15 to draw it here today, to safe time. This is my 16 drawing and I won't adopt it as yours, let's go through and see if you understand this to be the 17 18 general understanding of the organization called TIRC 19 and CTR. 20 This thing called TIRC was an idea that came 21 out of the Plaza Hotel meeting, is that correct? 22 That is my understanding, yes. 23 It was announced in January 1954, is that 24 correct? 25 A I believe so. 03745 1 And TIRC stands for Tobacco Industry Research 2 Committee, later called it -- changed to CTR, called Council for Tobacco Research? 3 4 Α Yes. You understand from the time it was first 5 formed up to the current time it has been exclusively 6 7 funded by financing from the tobacco companies, is 8 that correct? That is my understanding. 9 10 That's why I've drawn the arrow here to 11 illustrate that, is that correct, okay? 12 Okay. 13 The organization itself, TIRC later CTR, 14 actually had what is known as a scientific director, 15 is that correct? 16 Yes. 17 There was some staff affiliated with the scientific director, is that correct? 18 19 A I would believe so. 20 Then within the structure of TIRC there 21 actually was board called the scientific advisory 22 board which I've abbreviated by the letters -- I think 23 it's called SAB, is that correct? 24 Yes, I've seen that reference. Α And as far as the structure of the scientific 25 03746 director, the person who was going to be the 1 scientific director, the idea was that was supposed to 2 be someone who would be chosen who had a strong 3 background in the scientific world, is that correct? 4 5 Α Yes. 6 Then the members of this SAB, called the 7 scientific advisory board, the idea was there was --8 those were supposed to be people that were independent

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9
      scientists from different fields of science, is that
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      correct?
11
              That's certainly how it was set out, yes.
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               This board called the scientific advisory
      board over the years has varied somewhere between 8 to
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14
      15 or 16 members, is that correct?
15
               I don't know the numbers but I'll take your
        Α
16
      word for it.
17
               The job of the scientific advisory board that
18
      is composed of this independent scientist was they
19
      were actually supposed to receive proposals to do
      scientific research in the field of smoking and health
20
      from other independent scientists throughout the
21
22
      United States who wanted to do search certain
23
      research, is that correct?
24
               Then supposed to evaluate proposals to do
25
      research, yes.
03747
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               The idea was that throughout this great
 2
      country we have universities, scientific organizations
      spread throughout the United States is that correct?
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               I won't disagree with that.
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               The idea was that these independent
 6
      scientists, if they had an idea or proposal of some
 7
      type of smoking and health research they wanted to do
 8
      they could submit an application, if you will, to the
 9
      SAB and a proposal and explain what it is they were
      proposing to do, is that your understanding?
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               I believe that's correct.
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               And then the SAB which had these scientists
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      on it, it was supposed to review those applications
      and decide which research that the TIRC was actually
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15
      going to finance by giving money out to these
      scientists, is that correct?
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               Yes, although my understanding is what they
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      wanted to focus on was not the links between smoking
19
      and health but simply on cancer itself, they really
20
      wanted to focus on basic cancer research rather than
21
      smoking and cancer. That was part of the goal of
22
      TIRC.
23
               Actually the independent scientists make the
24
      proposals for what they at least say they are going to
25
      do, is that correct?
03748
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        Α
               That's correct.
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               My understanding is it's up to the advisory
 3
      board to decide which proposals to fund.
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              That is my understanding.
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               If they decided to fund it, it's funded with
 6
      tobacco company money?
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        Α
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               As far as this collusive agreement that
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      existed for all these years, I take it that the person
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      who served as the scientific director all these years,
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      that person had to be involved in this collusion in
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      order for this to be a sham all these years?
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               I think somebody, whoever made the decisions
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      said -- there is a document, there is a letter from
15
      the president of Lorillard who says that basically
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      they had abdicated the responsibility to the lawyers
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      and taken it away from the scientists.
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               So the question is how much power the
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      scientific director had versus ultimately how much
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20 power the lawyers had in deciding what would or would 21 not be done.

Q If this organization was a sham for all these years, wouldn't the person as scientific director have to be in on it, wouldn't he?

A You would have to chose the right scientific 03749

1 director.

- Q Then he would have to join the conspiracy?
- A Find a director who wanted the research you wanted to do. I think the documents were clear in that there was a lot of caution in who was chosen.
- Q Whoever this person was became part of this conspiracy, this collusion?
 - A Interesting question.
 - Q Strike the question.

Wouldn't it be pretty difficult to have an organization be a sham for 45 years and not have the person who is the scientific director of the organization be involved in the conspiracy, the collusion?

- A I think you would need to find the scientific director who was right-minded, shall we say, who wanted to do the basic research that's the goal of the sham and that was one of them, to focus on the disease and not the link between smoking and the disease, and if you found the scientific director who was more interested in the disease rather than the link between smoking and the disease, that would be advantageous.
- ${\tt Q}\,$ $\,$ By the way, I take it these men and women that were the scientists who were on the SAB, they had to be in on the plan also?

A For example, you would want to be very careful that you didn't have an anti-smoking person running this organization because what they might want to do is a very different kind of science than the organization was designed to do, it was planned to do.

- Q But if it's just a sham and they are not doing any meaningful research, the people, the men and women who were on the SAB would have to be in on the gig, right?
- A You would want to select them very cautiously.
- Q And they would be willing to be used in the collusive arrangement?
- A As I say, there is a lot of different science to be done, some useful for smoking and health, some useful for understanding cancer, and scientists want to understand cancer, too.

The industry said publicly was what it was interested in was the link between smoking and health but privately what it said was what it really was going to do was investigate cancer rather than smoking and cancer and I think if you found the scientific advisory board, if you populated the board with people interested in researching cancer as opposed to the link between smoking and cancer they would have is

very different view point as to what science they wanted to do.

3 Q Based on your testimony the men and woman who 4 would serve on the SAB would have to be people who

5 never intended to get at the truth regarding smoking and health issues, is that correct? 6 7 No, I wouldn't characterize it that way. 8 That's what you told us you thought the 9 conclusion was? 10 I think that's the way the industry felt about it but the industry didn't want to get at the 11 12 truth of smoking and health. 13 But if these men and women that served on the 14 SAB wanted to get at the truth concerning smoking and health, that would upset the whole collusion? 15 What you want to do is select people who are 16 17 interested in researching the disease rather than the 18 link between smoking and the disease and tell them you 19 want to do research on the disease, there is good 20 science, I'm not suggesting that science having to do with cancer is unimportant, there is perfectly good 21 science having to do with cancer. 22 23 Cancer is something we don't fully 24 understand, my understanding of it, not being a scientist. But that the public statement was that the 25 03752 TIRC would get at the link between smoking and cancer 1 2 but the documents indicate that as an strategic matter 3 what the industry wanted to do was to research the 4 disease, not the link between smoking and the disease in order to delay figuring out -- in order to delay 5 6 anyone finding out the truth about smoking and cancer. 7 I think this is a lot like you have an 8 automobile company, they discover that when their cars 9 are struck from the rear, the gas tanks explode. So you say, look, we take this very seriously, we'll set 10 11 up a research organization to sort this out. The first thing we'll do is figure out -- a 12 lot of time figuring out how fire works because we 13 14 really don't fully understand fire. Then once we 15 understand how fire works, we'll get around to the 16 link between auto crashes and autos catching on fire. 17 They said publicly they wanted to research the 18 question of smoking and cancer. 19 They being the industry? 20 Yes. But in fact the documents indicate that as an strategic matter what they wanted to do was 21 22 focus on cancer so that they could delay getting at the link between smoking and cancer. 23 24 And if you choose a scientific advisory 25 board, if you choose a scientific advisory board that 03753 1 is interested in researching cancer, there are 2 certainly any number of independent scientists that 3 want to do research on cancer and get their research 4 funded and they would want to apply to that board. 5 THE COURT: Take the morning recess. 6 (At this time a short break was taken.) 7 THE COURT: Please sit down. 8 MR. WEBB: May I proceed, your Honor? THE COURT: Yes. 9 10 BY MR. WEBB: Doctor, I am going to move on. I would like 11 12 to make sure I get an answer to the question I was 13 asking you at the time we recessed. 14 Is it your testimony that the members of the 15 scientific advisory board were part of the collusive

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agreement, to use your words, the collusive agreement,
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      to use CTR as a public relations front? Were they
      part of the collusive agreement?
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              I don't know that I would say that they were
      knowingly part of the collusive agreement. I think
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21
      that the collusive agreement really -- members of the
22
      scientific advisory board are not selling cigarettes.
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      They are not in the market for cigarettes. I think
24
      the tobacco companies are part of the collusive
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scientific advisory board with their goals in mind. The documents make it quite clear that they chose people with their goals of not revealing everything there was to be known about the safety -- the health aspects of smoking in mind.

agreement. I think they chose the members of the

- Q So the answer is, these people were involved for forty-five years in using this as a front and they didn't know about it?
- A I think they were -- I think they were selected -- yeah, I think they were selected carefully. You would not want -- for example, you would not want to pick Dr. Wynder to be on that committee because he was not likely to support the kind of research that the industry was interested in having done.
- Q I'm sorry. So they did know they were being used as a front for the tobacco --
- A No. I think they simply selected scientists who were interested in researching the disease as opposed to the link between smoking and cancer by and large. Later on they developed the special -- the lawyers' special projects arrangement --
- Q Doctor, can you answer my question?

 Judge, respectfully, I am interrupting only because I am trying to move this along.

THE COURT: Why don't you ask the question again.

BY MR. WEBB:

- Q All I am asking is, and if you can answer it yes or no, is it your testimony that the members of the SAB were not -- did not knowingly participate in using the CTR as a front for the tobacco industry?
- A I think I would say that they did not knowingly -- I have seen nothing to suggest that they knowingly -- that the members of the SAB knowingly took part in that. I think it is the industry that was colluding.
- Q And the scientific director, the person who served as the scientific direct for, and it changed over the years, is it your testimony that that person was knowingly part of the collusion to use CTR as just a front for the tobacco industry?
- A No. I think I would say pretty much the same answer, that I don't think -- I see nothing to indicate that the scientific director knew that the CTR, TIRC was being used to mislead the public. It was the industry wanted to mislead the public and they wanted to be very careful about who they chose as a scientific director, so they got the right person -- I have no evidence that the scientific director knew

that he was part of a conspiracy.

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Q And if that's the case -- just tell me, Doctor, how can it be that this organization could be used to do sham research for forty-five years and the person running the organization would never know about it?

It was not that it was fake research. The research itself might well have had scientific value, and might have been -- in fact, as I understand it, some of it was quite good science. It wasn't the kind of research that was needed in order to understand the link between smoking and cancer. And the documents make quite clear that that was -- that was intentional from the start, that the idea was to research the disease, not to research the link between smoking and cancer. And by doing so, to delay finding out and to be able to have things to say in the scientific debate, to be able to continually raise the question that we don't fully understand the disease and therefore we can't know that smoking really causes cancer and so forth, in order to muddy the waters and mislead the public.

Q Just so I understand, Doctor, where did you come up with the idea that these men and women that were involved in making decisions about what science

to fund, where did you get the idea that none of this research had anything to do with linking smoking to disease? Where did you get that idea from?

- A I don't get the idea -- I didn't say that those people had that idea. It was that the companies had that idea, and that the companies' lawyers expressed that idea quite clearly.
- Q What -- did the research actually go forward that showed the link?
- A I can't tell you. I will say this again. I can't tell you -- you really should ask somebody like Dr. Henningfield, who understands scientific -- the scientific research, who you can put papers in front of him and say, does this paper establish a link or not establish a link. I am not a person who can understand that.
- Q No, but Doctor, you are the one who told this jury about this collusive agreement to use CTR, you are the one that told them, right?
- A Yes. In the industry documents and -- the industry's documents and the statements by industry lawyers make that patently obvious to me. Now, you seem to want to say, well, then I ought to be able to evaluate the science and say which of the science was misleading and which isn't. I can't do that.

But the documents make it patently obvious to me that is what was going -- the intent of this was.

Q Let's see actually if you can do this, Doctor. Let me show you what is marked as Defense Demonstrative Exhibit 5210. Let me see if you can understand if, if you had looked at that before you gave your testimony. These actually -- so you know what you are looking at.

This is a summary of certain articles -- certain scientific research that has been funded by this sham organization. Are you with me?

12 You are telling me that. I will take your 13 word for that. 14 Q This is in evidence, Doctor. Okay? 15 Let's just look at it for a moment so we can 16 17 see if you would have been able to understand it if you had looked at it. The first one I will call to 18 19 your attention -- early on article of 1957 by a scientist named Dr. H.R. Pratt-Thomas who was funded 20 21 to do a research project for -- funded by tobacco through CTR as a grantee under the SAB program. 22 23 Are you with me? 24 I will take your word for that. Α 25 And do you see where he concludes in his 03759 1 scientific research, the bronchial trees -- you understand at least that is referring to the lung? 2 3 Loosely, yeah. Just loosely. Let's read it together, 4 5 Doctor. Go ahead. I have read that one as we sit 6 A 7 here and have no idea what conclusion one ought to draw -- I don't know what squamous means, I don't know 8 9 what metaplasia means. 10 You do know what that means, don't you? 11 I have no concept of what the significance of 12 that is or isn't. We will go through it, because the point you 13 14 were making is that you understood that CTR didn't do 15 any research to connect smoking to disease. 16 No. That is a mischaracterization. Α 17 Didn't you just tell the jury that? 18 No, that is a total mischaracterization of 19 what I just said. I'm sorry. This was a collusive agreement --20 21 you told the jury this was a collusive agreement to 22 use CTR as a public relations front for the tobacco 23 industry, and never get to the truth regarding smoking and health. 24 25 Is that your testimony? 03760 Yes. I think it is quite clear to me that 1 they -- that the intention of CTR was to -- and TIRC 2 3 was to research the disease, not the link between 4 smoking and cancer. Later on, to divide research 5 results that were favorable and unfavorable and hide the ones that were unfavorable to the industry behind 6 7 the shield of legal -- of lawyer -- legal privilege, lawyer's privilege. That's quite clear to me. 8 9 What I have said before, I think they may well have done some good science, but I can't tell you 10 what good science is, and they may have well done some 11 science that had some link, but I can't evaluate for 12 13 certain what all that means. To take one sentence out 14 of a scientific document and present it to an 15 economist and say, you understand the scientific implications of this, seems to me just silly. 16 17 Wouldn't you want to know that before you 18 came before a jury and told the jury it was a public 19 relations front? 20 The industry's own documents make it clear to 21 me that the industry and the lawyers felt it was 22 believed, in fact planned for it to be a public

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23
     relations front.
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      Q Let's just read the first one off to make
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      sure you have an understanding of what it says here.
03761
              It says, the bronchial trees of smokers. You
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     understand those words, the bronchial trees of
3
      smokers?
 4
              I know that the bronchia has something to do
5
     with the lungs. I have no idea what the bronchial
 6
     tree is.
7
              Something to do with the lungs of smokers, is
8
     that right?
9
              Yes.
             Manifest. You understand what that word
10
11
    means?
      mea...A
12
              Yes, vaguely. Yeah.
              Manifest roughly doubled the incidence.
13
              Do you understand that phrase?
14
15
              I think I have a layman's understanding of
16
      that phrase.
17
              Double the incidence of pre-cancerous.
18
              Do you understand what the word pre-cancerous
19
     means, something that occurs before cancer occurs?
20
              Yes.
21
              So apparently this is double the incidence of
     pre-cancerous. So you don't know the next phrase?
             I have no clue.
23
24
              That's okay. You don't know that phrase.
              As those of nonsmokers.
25
03762
              Do you see that?
1
2
              I do.
        Α
3
              Wouldn't that at least indicate to you,
     Doctor, in being fair, that this doctor has come to
4
     the conclusion that the lungs of smokers have doubled
5
     the incidence of certain pre-cancerous cells of those
 6
7
     of nonsmokers?
            I don't even know if it has anything to do
8
9
    with cells. Is it a squamous metaplasia -- I'm sorry.
10
    It is one sentence that -- what I presume is a much
11
    larger document. And I have no idea what the
12
    scientific consequence or relevance or significance of
13
     that statement is.
14
              Let's go to the next one and see it will make
15
      it easier for you.
16
              The next one is a study funded by CTR for a
17
      scientific study carried out by a Dr. E. D. Warner.
18
              Can you see that okay?
19
20
              Dr. Warner -- another earlier study back in
      1961, in which he concludes there is a significant
21
22
      relationship between smoking and bronchiogenic
      carcinoma.
23
24
              Do you see that?
25
              Sure.
03763
              Would you at least be able to tell the jury
1
      that you understand that this scientist reached a
 2
      conclusion that was complete -- strike the question.
 3
 4
              This scientist clearly reached a conclusion
 5
      that there is a significant relationship between
 6
      smoking and cancer. You at least understood that?
 7
            Again, to take this one statement out of an
```

8 entire scientific document and ask me to judge what 9 the scientist consequence or significance or importance of that is -- the next sentence might well 10 11 say, however, this has nothing to do -- or however, it has not been established in any way that smoking 12 13 causes cancer. I don't know what this guy is concluding. I certainly know -- I will take your word 14 15 for it, that he wrote that sentence in a scientific 16 report. 17 But beyond that, I have no idea what his conclusions were, the whole conclusion of his research 18 19 or anything like that. 20 But, Doctor, we are testing your opinion that 21 you have given this jury that this organization was a 22 public relations front and did not ever get at the 23 truth of smoking and health. 24 A Quite frankly, Mr. Webb, I think you are 25 testing my understanding of the science. And I quite 03764 1 frankly will admit to you I don't I don't know what 2 the science means. Q If it turned out, Doctor, the CTR did an 3 enormous amount of research in smoking and health 4 5 showing a link between disease and smoking, that would 6 explode your entire theory of collusion? 7 A We would then have a really interesting 8 puzzle as to why the lawyers in the industry and the 9 CEOs of the companies and so forth said that they felt that the purpose of TIRC and CTR was to serve as an 10 11 industry shield, that it lost its credibility 12 eventually by repeatedly saying, no, no, no, there is 13 no link, that it was designed to use research on the 14 disease to confuse the question of a link between smoking and cancer. That would be very puzzling, 15 16 wouldn't it? 17 Would you have liked to have seen some of 18 this before you reached your conclusions before this 19 jury? 20 I have told you many many times as you showed 21 me this, I do not know for certain what the consequence -- what the importance of these statements 22 23 are. To take one line out of a study of the trachea 24 bronchial epithelium and changes related to smoking, 25

and to say that is a conclusion -- I have no idea what

that paper --

03765 1

2

3

4 5

6

7

8

9

10

11

- Q If I am taking this out of context, Mr. Ferguson can ask you questions. Do you understand
- Sure. All I am saying is you have given me a sentence from a paper and said there is a conclusion there, isn't there? And I have no idea what Dr. E. D. Warner concluded.
- I'm sorry. I am representing to you this is what he concluded. Do you see this?
 - Yes, I see it.
- And so when you see that he -- he was funded 12 13 by CTR -- would you agree that that is a conclusion 14 that links smoking to a disease?
- 15 I don't even know that that is his
- conclusion. That is a statement -- one sentence taken 16
- 17 out -- as I said, the industry has had no trouble
- 18 saying, even though there is statistically -- excuse

```
19
      me, statistically significant relationships in
20
      epidemiological studies that you can't really learn
      anything from epidemiology. That's a position they
21
22
      have taken that it is only statistics.
               Without being able to read the rest of the
23
24
      paper -- and I'm not sure I am in a position to read
25
      the rest of the paper. I don't know what he
03766
1
     concluded. I will take your word for it that he wrote
 2
      that sentence down. But whether that sentence fairly
      states what his conclusions are about smoking and
 3
      health, I can't tell you. I think if you gave me the
 4
      entire paper I wouldn't be able to understand that,
 5
 6
      either.
 7
        Q
               I may have it here. Let me ask you -- show
 8
      you his actual paper, since you mentioned it. I am
      just trying to show whether or not you could have
9
      figured this out before you gave this jury this
10
11
      opinion. I happen to have the actual paper here. It
12
      is marked in evidence as Defense Exhibit MP5316, in
      evidence. It is that very article.
13
14
               Do you see that article there, sir?
15
               Yes.
16
              That is the article by these doctors,
17
      including Dr. Warner. Do you see him there?
18
             Yes.
19
              And actually to show you --
20
              It is from Iowa City.
        A
21
              Do you recognize that?
22
        Α
               I recognize Iowa City, you bet.
23
              You consider that to be an honorable -- is
24
      that the university -- are they from the university?
25
      I haven't looked at that. Do you recognize their
03767
1
     names?
 2
        Α
               No.
 3
               But just so you see --
               It is highly likely they are from the
 4
         Α
      University of Iowa, because I don't think the private
 5
 6
      Catholic hospital was doing this kind of work in 1961.
 7
              You said they are from --
 8
              I would bet they were. I wasn't there in
      1961, so it could --
9
10
             It is an honorable institution, anyway?
11
               I would like to think so.
12
               I am going to show you the actual last page
13
      so there is no question this is the conclusion they
14
      drew after doing this. A conclusion that is very
      harmful to the tobacco industry, don't you agree?
15
16
               A significant relationship was demonstrated
17
      between smoking -- you understand that, don't you?
18
      Just the first phrase, you understand up to the comma?
               I think so, yeah.
19
20
               The amount and degree of a typical
21
     metaplasia. You may not understand metaplasia, you
      told us?
22
23
               Right.
        Α
24
               It doesn't look good, though, does it?
         0
               Beats the heck out of me.
25
03768
               And the incidence of bronchiogenic carcinoma
1
        Q
 2
      lung cancer?
 3
              You are telling me that bronchiogenic is lung
```

cancer? I will take your word for it. I'm sorry. 4 5 This is not my language. 6 Q All right. That's what it means. But I will 7 tell you what -- the fact that you are being told that smoking causes bronchiogenic carcinoma isn't a very 8 9 good thing? A It doesn't say smoking causes. It says there 10 11 is a significant relationship. 12 Q Do you find that -- isn't this the type of 13 research that the tobacco industry was never supposed 14 to do under your collusion theory? 15 I don't know what kind of research they did here. I can't tell you -- you show me again now that 16 17 sentence from the paper --18 Q No, but you said I took it out of context? 19 So now you have shown me the very last sentence of the paper. I don't know what the rest of 20 21 their findings were. Again, as I say, if you hand me 22 the paper, I probably won't be able to understand it. 23 Yeah, you have now shown me it is a sentence in the paper. Where it is in context, I don't know yet. It 24 25 is still just a sentence standing by itself. 03769 1 By the way, do you find most people when they 2 write a paper, though, put the conclusion at the end so 3 we know what their conclusion is? 4 We usually put our concluding section at the 5 end. You are not doubting this is the conclusion, 6 7 are you, Doctor? 8 What I am saying is, I am not in a position A 9 to judge what they are saying. 10 Q Would you like to look at the document? I am willing to look at it. In all 11 likelihood I am will not be in a position to tell you 12 13 what it means. Q It is marked MP5316. And if there is 14 anything in there that shows that this was sham 15 research or public relations front, can you tell us 16 17 about it. 18 By the way, it is not from the University of Iowa. It is from the Iowa City Veterans 19 Administration Hospital. And I should have thought of 20 that one. I'm sorry I missed that one. 21 I'm sorry. 22 2.3 Q I am just asking, do you see any indication 24 this is sham research? 25 A No. I imagine this is serious research. I 03770 won't -- I have no doubt about that. I am just not in 1 2 a position to evaluate --3 Q Does it surprise you that the tobacco company 4 funded that research, that negative to the tobacco 5 industry? 6 I don't know how negative this is or isn't. 7 I will leave it to the doctors to determine whether this was a negative or very negative -- I really -- I 8 9 don't know. Let's look at the next one. The next one on 10 11 this chart, it says chronic smokers -- you understand what the word chronic means? 12 13 A I believe so. 14 Q Chronic smokers are more likely to develop a

greater incidence of coronary disease -- you 15 16 understand what coronary disease is, heart disease? 17 Broadly, yeah. 18 Chronic smokers are more likely to develop a greater incidence of coronary disease at an earlier 19 20 age, and manifest a higher incidence of coronary 21 artery occlusion. 22 Do you see that? 23 Α Yes. 24 Q Do you understand what that is saying? 25 Not entirely. 03771 The idea that people who smoke are more 1 2 likely to develop more heart disease, is that hard to 3 understand, that finding? 4 I don't know what is missing in the dots, but, no, taking that sentence just as it is, that 5 6 seems to say what it says. 7 Q That's not very helpful to the tobacco 8 industry, is it? 9 A It depends on what the rest of the document 10 -- the next sentence could start but. I have no idea what the ultimate conclusion of that statement --11 12 Even if there was a but after that, the fact 13 that these researchers came to that conclusion 14 connecting smoking to heart disease is not very 15 helpful to the tobacco industry, is it? 16 No, not necessarily. Α 17 Not necessarily? 18 Α No, it is not. If that were the ultimate 19 conclusion, that probably --Q How about the next one. This was actually 20 21 1965, a study funded by this sham organization, CTR, by Dr. Hester on the relationship of smoking to the 22 outcome of pregnancy. A significant decrease in birth 23 24 weights of infants born to mothers who smoke was found. Do you see, that sir? 25 03772 1 Α Um-hum. 2 Do you understand what that is saying? 3 I think, yeah. 4 By the way, connecting smoking to low birth 5 weight is not a very good thing to the tobacco 6 industry, is it, sir? I don't know. Again, you are asking the 7 8 wrong person. It doesn't sound great to me. But you 9 should really ask the doctors -- it could be related 10 to other things. I just don't know. 11 How about this next one? This is another 12 research funded by this organization, CTR, or TIRC, 13 1963, called the addictive aspects of heavy smoking. 14 Do you see what the --15 See the title, yes. Α 16 This statement by Dr. Knapp, heavy cigarette 17 smokers thus appear to be true addicts, showing not 18 only social habituation but mild physiologic withdrawal effects. 19 20 Do you see that? 21 Α Yes. 22 And would you agree that that does not appear 0 23 to be a very helpful finding to the tobacco industry? 24 Yeah, it probably wouldn't be. 25 Are you surprised that CTRs funding that type Q

03773 of research based on your theory of collusion? 1 2 It certainly doesn't have anything to do with 3 cancer, the last three have nothing to do with Dan 4 cancer, which was the big fear. But in any event, no, it doesn't surprise me at all. They did a variety of 5 6 research. 7 Again, I can't tell you -- you have taken one 8 sentence, it says thus appear, my understanding the 9 industry denies to this day, in fact I think I was 10 here when Dr. Henningfield talked about addiction, and the industry denies to this day that it is addictive. 11 This doesn't seem to be very good. 12 13 Without seeing the whole thing -- again, not 14 being really in a very good position to evaluate the 15 whole piece of research, it does not appear to be very good, that one sentence, I will grant you that. 16 Q Let's look at some more. I am now going to 17 18 show you what is marked as demonstrative Exhibit 5211 19 in evidence. These are some more findings published 20 by CTR grantees. 21 Do you see the heading, sir? 22 I see your heading, yes. 23 Let's look at this one. This is 1969, a 24 study on the association of cigarette smoking with 25 coronary and aortic arteriosclerosis. 03774 1 Do you see that? 2 Α Yes. 3 Do you generally understand that to be 4 referring to heart disease? 5 A I know that coronary has something to do with 6 the heart. 7 Have you heard of arteriosclerosis, hardening of the arteries, you have never heard of that? 8 9 I have heard of arteriosclerosis. I don't 10 know the details. That is arthrosclerosis. You don't know what the details --11 0 12 I don't know what arthrosclerosis is. Α 13 Smoking, or an associated factor, affects the 14 development of mural arthrosclerosis, and the apparent 15 relationship of smoking to CHD, coronary heart disease, is not limited to the events surrounding the 16 17 terminal occlusive episode. 18 Do you see that, sir? 19 I do. Α 20 Does that appear to be connecting smoking to heart disease? 21 22 I have no idea what conclusion I am supposed A 23 to draw from that. 24 None at all? Q 25 I don't know what the associated factor could 03775 1 be. I don't know what mural arthrosclerosis is. And 2 I don't know what the terminal occlusive episode is. 3 I am really not the person to tell you what that 4 sentence means at all. 5 You have no hint at all that is a finding 6 that is adverse to the tobacco industry? 7 I really do not know what that sentence 8 means, even as it sits there, much less what the 9 conclusions of the entire paper would be from that one 10 sentence.

Let's see how the next one -- if this is as 11 12 equally hard for you to understand. 13 Emphysema. You know what that is? 14 Yeah, vaguely. You understand that's a lung disease? 15 Q 16 Yes, I do understand that is a lung disease. A 17 Emphysema in smokers might be due in part to 18 local suppression of elastase inhibition in the lung 19 by cigarette smoke. 20 Do you see that? 21 Α Yes. 22 Do you understand what that is saying? I understand what the sentence says, except I 23 24 have no idea what the suppression of elastase 25 inhibition is. I don't know -- local suppression of 03776 1 elastase inhibition, I have no know idea what that 2 means. 3 Does that appear to be connecting the disease Q 4 of emphysema to smoking? A Again -- yeah. Taking that one sentence 5 6 there, it certainly seems to be pointing somewhere in 7 that direction. But I am not the right person to ask. 8 Let's look at the next one. This is research 9 funded by the same organization, CTR. This is 1979 by 10 a scientist named G. D. Friedman. Mortality in Middle 11 Age Smokers and Nonsmokers. 12 Do you see that? 13 Yes. 14 I will read this over. 15 Accounting for forty-eight other characteristics, both individually and in combination, 16 17 failed to eliminate the association of smoking with mortality -- that means death, you understand that? 18 I do understand that. 19 20 -- smoking with death from all causes or 21 mortality from coronary heart disease. 22 Do you understand what is being said there? 23 Not entirely. My interpretation of that is 24 that -- basically they went and looked for a bunch of 25 other things that might have caused smoking rather 03777 than -- sorry, caused death from all causes or death 1 2 from coronary heart disease. 3 At least the forty-eight they found after 4 they have controlled for the forty-eight they found 5 they still could not eliminate the possibilities there 6 was a link between smoking and mortality from all 7 causes. 8 Q It says possibility. Even looking at all 9 these other factors --A Forty-eight other factors. 10 11 -- they still came to the conclusion that 12 smoking is associated with death from all causes? 13 They failed to eliminate the association. 14 There is a distinction in science between proving that something happened and not having proved that it 15 16 doesn't happen. 17 But you agree that is not a very helpful 18 finding to the tobacco industry, Doctor? 19 Again, I can't tell you what the overall 20 conclusion of the paper is without knowing what the 21 rest of it is. That sentence itself does not seem to

be very helpful to the tobacco industry. 22 23 That sentence says smoking will kill you --2.4 Α No. 25 Q -- doesn't it? 03778 1 Again, based on what I know about this, which is not great, but what I do know about statistics is 2 3 it doesn't say that smoking will kill you. It says, we looked at a bunch of other things -- what it says 4 5 -- as best as I can tell, and, again, I am not the person to be making these judgments, but there is a 6 7 statistical link, a statistical association even between smoking and death from all causes, or smoking 8 and coronary heart disease. And this is the sort of 9 thing the industry has said in the past, maybe it is 10 11 just a statistical relationship. Maybe it is just that people who smoke and people who die from heart 12 13 disease or cancer or something else have some other 14 thing in common. Maybe it is genetic, maybe it is 15 something else. So they started looking, and they 16 looked at forty-eight other things and they couldn't 17 eliminate -- they basically eliminated those 18 forty-eight things, but there might be something else 19 that was common to smokers and people who had heart 20 disease. 21 Again, you are getting -- this does not prove 22 -- to say that something has failed to eliminate an association is not the same thing as something has 23 proven the association. Failing to eliminate is still 24 25 an open question. Proving is something else. 03779 I'm sorry. Go ahead. 1 2 It doesn't sound like it is a very good result for the tobacco industry, that sentence by 3 itself, because at least it says of all the various 4 things that might be causing -- that might be causing 5 6 the statistical link between smoking and coronary heart disease, these forty-eight aren't it. But it 7 8 doesn't go on to say, now we have shown -- because 9 these forty-eight aren't it, it has got to be smoking. 10 That conclusion just doesn't follow as a matter of 11 statistics. Does it surprise you that this so-called sham 12 13 organization, CTR, funding research came out that 14 negative to the tobacco industry? 15 Again, without seeing the whole thing and 16 understanding the whole paper, I don't really know 17 what the ultimate conclusion of that paper is. 18 I am going to recommend to you that is the conclusion. Does that surprise you? 19 20 No, not particularly. 21 I'm sorry. I thought you said under this 22 collusive arrangement CTR was not to ever get to the 23 truth of smoking and health. 24 I think they were going to try to avoid that 25 as best they could. Eventually they started figuring 03780 1 out that sometimes things got published that didn't go 2 their way and so they started taking control of the 3 right to decide who would publish and who wouldn't. 4 Eventually they set up the lawyers' special projects 5 to hide the results that didn't go their way. 6 I think they took a variety of steps to see

to it they hid the truth as best as possible. Whether 8 they have managed to do that perfectly successfully or 9 not is a whole 'nother matter. But the documents make 10 it quite clear that is what the goal of the 11 arrangement was. 12 Let's see the next one. 13 Another CTR funded project in which the 14 researcher concluded that smoking was likely --15 By the way, this is 1981, 1983. Do you see 16 that, sir? 17 A I do. Smoking was likely responsible for the 18 depression of HDL, the good cholesterol level of 19 20 smokers. 21 Do you see that? 22 Α Yes. 23 That is not a very good finding for the 2.4 tobacco industry, is it? Again, you have to ask the scientists what's 03781 1 a good -- that sentence on its face does not look like a very good result. 3 I know you are not a scientist, but you have 4 generally heard about this thing called HDL, which is 5 good cholesterol. 6 A I have heard about cholesterol. I will tell 7 you that good cholesterol, bad cholesterol, good fats, bad fats, I am not a person to judge -- I have heard 8 9 the debate. 10 Q Doctor, have you at least heard -- we try to 11 have good cholesterol high, don't we? 12 I guess, yeah. A 13 You have never heard that? At that level that's what I know. You want 14 to have good cholesterol high and bad cholesterol low. 15 Apparently smoking doesn't do any good 16 because it reduces the good cholesterol? 17 18 A According to the finding and that sentence 19 that seems to be the case. 20 Let's look at one more. 21 I will now show you what is marked as Defense Demonstrative Exhibit 5212 in evidence, same thing, 2.2 more findings published by CTR grantees over the 23 24 years. Let's look at this first one at the top, see 25 if you can understand what this is saying. 03782 1 It says, use of cigarettes, cigars, a pipe or a combination of these increases the -- you understand 3 the word increases? 4 Yes, that one I understand. 5 The prevalence of, then it has a long word, 6 leukoplakia lesions, which I assume you don't know 7 what that is? 8 A You're right. 9 But which are related to oral cancer? 0 10 Α 11 So the fact that cigarettes are related to 12 oral cancer, that is not a helpful finding to the 13 tobacco industry, is it? 14 No, that would not be. Α 15 How about the next one? The next one, done in 1988 as a scientific 16 17 study funded by CTR called Collective Stimulation of

```
18
     Limbic Dopamine Activity by Nicotine.
19
             Do you see that?
20
        Α
              Yeah.
21
              Do you see what it says?
         Q
22
        Α
              I see what it says.
23
              Nicotine consumption is connected with
24
      neurological activity.
25
              You understand what neurological activity is?
03783
1
        Α
              Vaguely, yes.
2
              Do you understand it is connected to the
3
      brain activity?
 4
               Something to do with your brain, your nerves,
 5
     yes.
 6
       Q
              Nicotine consumption is connected to
7
     neurological activity associated with addiction.
8
              Do you see that?
9
              Yes.
10
              And it goes on to give these medical terms
11
      thereafter?
12
       A
13
              Which I assume you probably don't understand
14
      those medical terms?
15
       A That is a pretty good guess. Regionally
16
      selected DA mesolimbic dopamine synthesis.
17
             Let's see if you understand the first part.
18
              Nicotine consumption is connected to brain
19
      activity associated with addiction.
20
              Yes.
21
              That's not a very good finding for the
22
      tobacco industry, is it?
      A Again, it is one sentence connected with, as
23
24
      opposed to causing -- I don't know what the results of
25
      that paper are on the basis of that one sentence.
03784
      That one sentence doesn't sound very good, I will
1
2
      grant you that.
3
              Are you surprised that CTR's funding that
4
      kind of research?
5
             As I said, I think the CTR was trying to
      limit -- was trying to prevent people from finding out
 6
7
      as much as they could have about the health
      consequences of smoking. I don't think they
8
     necessarily did a perfect job of it. But the
9
10
     documents make quite clear that they wanted to not --
11
      they did not want to be doing -- they did not want to
12
      be focusing on the link between smoking and cancer or
13
      smoking and disease. I have repeated myself four or
14
      five times now. No, it doesn't surprise me.
15
               That sentence doesn't sound very good,
16
      although I really can't tell you for certain on the
17
     basis of that one sentence what that particular doctor
18
      found. I am not suggesting that CTR didn't ever do
19
      any real science or any good science, but that the
20
      documents are quite clear about what the purpose of
21
      CTR was.
22
              Okay. You understand what I am showing you,
23
      these are not secret documents, these are published in
      scientific journals? You understand that?
24
25
              I will take your word for that, yes.
03785
1
               So that they are there -- if CTR is being
 2
      used as a front and a sham for the tobacco industry,
```

3 it is not working very well, is it? 4 A You have picked out some. We would have to look at the whole range of research that they were 5 6 doing and try to judge whether these fifteen or twenty 7 or however many there are or however many there are in 8 total, what proportion of those were compared to the 9 total. 10 And again, you would need a doctor, or 11 somebody in the public health community could give you a better assessment of how much valuable research was 12 being done on the link between smoking and disease and 13 how much research that was just focused on disease was 14 being done. 15 16 As I say, the documents make it quite clear 17 that the industry viewed the purpose of CTR and TIRC 18 to be an industry shield. The documents make it quite 19 clear that the industry eventually came to the conclusion that because TIRC and CTR had denied, 20 21 denied, denied for so long that there was any link 22 between smoking and cancer, that eventually it lost its credibility. The documents make it quite clear 23 that CTR was used by, for example, Philip Morris to 24 communicate to U.S. Tobacco to stop doing health 25 03786 1 advertising. Yes, it appears that they have done some 3 science. Some of that science may well have not been in their best interests. I am not really the person 4 to evaluate any one specific piece of that or to be 5 6 able to weigh the lump sum total of that research and 7 all the research they were doing. But the documents make it quite clear what the goal and how -- what the 8 9 goal of CTR was and how they went about doing things. You understand we are not talking now about 10 some goal or some abstract goal, we are talking about 11 12 -- this shows you what CTR actually did, do you 13 understand that, Doctor? 14 That shows a small piece of what CTR actually 15 did. 16 If they didn't do any more than this, if they 17 did no more than this -- strike the question. I strike the question. 18 19 Let's look at the next one. The next one. 20 Maternal. You understand that refers to a mother? 21 Yes. 22 Tobacco smoking during pregnancy excerpts, a retarding influence on fetal growth. 23 24 Do you understand what that is saying? 25 03787 1 Manifested by decreased birth weight and 2 dimensions of the infant. 3 Do you see that? 4 Yes. 5 Q Clearly connecting smoking to reduced birth 6 weight? 7 Α Yes. 8 That is not a very good finding for the 9 tobacco industry, is it, sir? 10 If that is the final conclusion of the paper, 11 that does not sound like a very good conclusion for 12 the tobacco industry. 13 How about the next one?

Women smokers show a higher level of 14 15 thromboxane, which I'm not sure what that is. 16 Do you know what that is? 17 18 A(2), but it is an important clotting factor 19 that plays a role in heart disease. 20 Do you see that? 21 I do. 22 Would you agree that doesn't sound very good Q 23 for the tobacco industry? 24 A No, that sentence by itself does not sound 25 very good for the tobacco industry. 03788 Now, as far as the totality of the work done 1 2 by CTR -- let me show you, first of all, the people 3 who were the scientific directors of this organization 4 over the years. 5 MR. FERGUSON: What is the number on this? MR. WEBB: Demonstrative Exhibit 5209. 6 7 BY MR. WEBB: 8 The first director was Dr. Clarence Cook Little, 1954 to 1971. Do you see that, sir? 9 10 Yes. 11 Did you make any effort to learn about his 12 background before you concluded that CTR was a front 13 or sham? 14 Α 15 It says here that his background was, he was president University of Michigan, president of the 16 17 University of Maine, founder. Jackson Memorial 18 Laboratory. Managing director of the American Society 19 for Control of Cancer, which is now the American 20 Cancer Society. 21 Do you see that? 2.2 Yes. 23 And he was the president of the American 24 Association for Cancer Research. Do you see that? 25 A 03789 1 Does that look like the background of a reputable person from the scientific community to head 2 up this organization? 3 It looks like the background of a reputable 4 5 scientist. Let's look at the next one, Dr. Gardner, he 6 7 was the next scientific director of CTR. It says here 8 that he served for nine years. He was professor and 9 chairman of anatomy at the department, Yale Medical 10 School. 11 Do you see that, sir? 12 Α 13 President of the International Union against 14 cancer. President of the American Association of 15 Cancer Research. Member of the National Cancer 16 Institute. 17 Do you see that? 18 Α Yes. 19 That is a government agency? 0 20 Α Yes. 21 Over two hundred scientific publications. Do Q 22 you see that? 23 A 24 Does Dr. Gardner appear to be someone who has Q

```
a strong background in the scientific community based
25
03790
1
     on what you've just seen there?
              Yes.
              The next director of CTR, Dr. Sheldon
3
4
      Sommers, for six years from 1981 to 1987. It says
     here he was the head of pathology at Lenox Hill
 5
     Hospital in New York. Faculty member at Columbia and
 6
7
     Harvard Medical Schools. President New York
8
     Pathological Society. Over three hundred scientific
9
     publications.
10
              Do you see that?
11
        Α
              Yes.
12
              Does he appear to have a reputable background
13
      in the scientific community?
14
        Α
              Sure.
15
              The last director was Dr. James F. Glenn,
        Q
      1988 to 1990. President, Mount Sinai Medical Center,
16
17
      New York. Dean, Emory Medical School, chief of
18
      Urology, Duke Medical School. Executive director of
19
      the Markey Cancer Center. And over 250 scientific
20
      publications.
21
              Does he appear to be a person with a strong
22
     background in the scientific community?
23
             Sure.
24
              Have you looked at the backgrounds of the men
25
      and women who served on the scientific advisory board
03791
      that had the responsibility of reviewing these
1
 2
      applications for research?
3
        Α
              No.
4
        Q
              You didn't review their backgrounds before
5
     you reached your conclusions about the collusion?
 6
        A
7
              I will show you a couple of listings here.
      This is demonstrative Exhibit 5199. These are members
8
      from 1954 to 1997. Let me back up so we can at least
9
10
      try to get this on here a little bit.
11
              Can you read some of those --
12
              Yeah.
13
              -- on your screen there so can you see the
14
     type of people that served on the scientific advisory
15
     board?
16
        Α
17
        Q
              Do those at least appear to be reputable
18
     institutions?
19
       A
             Sure.
20
              Go ahead and look. Is it easier to see on
21
      your screen?
22
        A It is equally bad there and there.
              I have an extra copy.
23
24
              The one that I don't think is necessarily a
         Α
25
      reputable institution is the one that is down about
03792
1
      midway, McCallister Council for Tobacco Research.
      Aside from that, the rest of them appear to be
 2
 3
      reputable institutions.
 4
             But that one --
 5
              The rest of them, I'll not quibble with any
 6
      one of those hospitals, medical centers, universities.
 7
      Q I checked off -- some of those are
 8
      outstanding universities, are they not?
 9
        Α
             Yes.
```

10 And from -- like the National Cancer 11 Institute, the Fox Chase Cancer Center, the Kimmel 12 Cancer Center at Jefferson Hospital, as far as you 13 Again, since I am not a cancer researcher, I 14 15 have never heard of the Kimmel Cancer Institute at Jefferson Hospital. I have certainly heard of Harvard 16 17 University, University of Wisconsin. I am not 18 quibbling with you. I will take your word for it. 19 You have established that is an important cancer institute. I don't know. I can tell you what the 20 best economics departments are in the country, I can't 21 tell you what the best cancer research --22 23 You know what The Cancer Institute is? 24 Α Sure. 25 I have tried to check off, the one from this 03793 list, Mr. Coates, from The Cancer Institute, so is Dr. 1 Andrew Bolt, so is Dr. Huebner. 2. 3 Do you see that, sir? 4 Yes. 5 So you are not doubting that the men and women who served on the scientific advisory board to 6 7 make decisions about what research to be done appear 8 to be reputable scientists, do they not? 9 They do. Now, if we look at the totality of research 10 done by CTR, let me show you -- I will ask you if you 11 became aware of this information before you reached 12 13 your opinions in this case, sir. I am reading from 14 demonstrative -- defense demonstrative Exhibit 5203. 15 Did you understand prior to rendering your 16 opinion about the collusive nature of CTR that it provided over 284 million dollars to fund research 17 during the time period 1954 to 1997? Did you know 18 19 that? 20 I'm not sure I knew that precise number. Let 21 me think about that one for a second. 22 Q Did you know before you reached your opinions 23 in this case about the collusive nature of CTR --24 That's about 3 million dollars a year, is 25 that what that boils down to? I am just trying to --03794 go ahead. I didn't know that precise number, no. 1 2 Q Did you know that from 1954 to 1997 that CTR 3 funded 1,395 scientific research projects? No, I probably didn't know that precise 4 5 number, no. 6 You didn't know how big it was? 7 I knew they funded a lot of science. I don't 8 deny that. The precise number, 1,395 -- as I say, the question is, is that the sort of science that links --9 10 of those 1,395 research projects which of them are 11 aimed at researching the disease, which is potentially 12 valuable science in and of itself, but doesn't do what 13 the industry said they were going to do in their Frank 14 Statement, which is find out the truth and the link 15 between smoking an cancer. I believe they had a lot of grants. 1,395 over that time period, I suppose we 16 17 could go on to put that in some sort of comparison with how many scientific research projects the 18 19 National Cancer Institute did or Sloan-Kettering did. 20 But that's a sizable number.

```
Do you think it was a bad thing that the
21
22
      tobacco industry was -- strike the question.
23
              They funded research by 1,190 independent
24
      scientists at over three hundred research
25
      institutions.
03795
1
              Do you see that?
2
        Α
              Yes.
3
              I take it you have no reason to believe these
4
      independent scientists were some part of some
5
      collusive sham, do you?
              Not personally. I think those scientists
 6
7
      were interested in researching cancer. Most of them
      were interested in researching cancer, which is a
8
      valuable thing to research. But the stated -- the
9
10
      publicly stated purpose of the CTR was to research the
      link between smoking and cancer.
11
12
             Are you faulting the tobacco industry because
13
      it chose to fund 1,190 independent scientists?
14
             Not in and of itself, no.
15
              The fact that three of the grantees later won
16
     noble prizes, do you fault the tobacco companies for
17
      that?
18
             I don't give them credit for it, either,
19
     but, no, I don't.
20
      Q The fact that there is over 6300
21
      scientific publications that now exist because of
      tobacco money, do you fault them for that?
22
23
              Not necessarily, no.
24
              Did you look and see how often the surgeon
25
      general of the United States has actually cited those
03796
1
     reports?
      A No. I have had it represented to me, but I
2
      didn't look into it myself.
3
             Before you reached your opinions that this
4
 5
      was a sham organization, did you learn that if we look
      at the surgeon general reports and the number of times
 6
7
     that they have actually referred to CTR funded
8
     research, that you would find over five hundred
9
     citations to CTR research? Did you know that?
10
             I think I had heard something along those
11
      lines, sure.
12
       Q Now, you understand that the surgeon general
13
      -- that's the office that has been rendering these
14
      reports over the years that connects smoking to
15
      disease, is that correct?
16
       A
             Yes.
17
              So the public health officer who is
18
      connecting smoking to disease found it worthwhile to
19
      at least cite CTR research more than five hundred
20
      times?
21
              Apparently.
22
              Do you think if you had known that, that
23
      might have helped you reach a different conclusion
24
      that CTR was just a collusive sham organization?
              No. I knew that and I still have that
25
03797
1
      opinion of the CTR. As I said, the CTR funded a lot
 2
      of research --
 3
              MR. WEBB: I have no question pending, your
 4
 5
              THE WITNESS: I am completing my previous
```

6 7 THE COURT: There is no question pending. 8 You can explore that on redirect. 9 BY MR. WEBB: 10 I will move to the third agreement now, Doctor. The third agreement, the third collusive 11 agreement that you wrote on this chart is the what you 12 13 called the arrangement -- I take it you mean the 14 collusive arrangement, is that correct? 15 Yes. 16 -- to refrain from in-house testing of live 17 animals? Yes. I emphasized just for the purposes of 18 keeping it short, I didn't say relating to smoking and 19 20 health, relating to the issue of smoking and health. 21 But that's what I mean. MR. FERGUSON: Mr. Webb, can you move one of 2.2 2.3 MR. WEBB: I will get this completely out of 25 the way. And I will move this around to make it 03798 1 easier for you. 2 BY MR. WEBB: 3 Now, directing your attention to this third 4 arrangement. I want -- I want to make sure I 5 understand your testimony correctly and then I will go 6 on and ask you some questions about it. 7 It is your testimony that from an economist standpoint if the tobacco companies entered into an 8 9 agreement not to do biological research, you believe 10 that would be anti-competitive because such an agreement might slow down the development of safer 11 12 cigarette products, is that correct? I'm not sure I would make it quite as broad 13 as you just made it, my statement, no. I think you 14 15 broadened -- you broadened my statement considerably, 16 my testimony considerably. 17 That is not your testimony -- you are not 18 suggesting that it slowed down the development of 19 safer cigarettes? 20 No. That is the nature of the agreement that 21 I think you are mischaracterizing. 22 Okay. Let's find out. The agreement is an 23 agreement not to do in-house biological research? 24 In-house biological testing of live animals 25 for the purpose of determining -- for evaluating 03799 1 smoking and health. I will live with that phrase for 2 the moment. 3 So, if you will, to make it a little easier 4 for the jury and me, if I use the term biological 5 research, I promise you I am referring to it in the 6 way you just said. 7 That is an important distinction, because the 8 industry does a lot of research on biology, for 9 example, research on -- research on tobacco plants is research on biology at some level. Tobacco plants are 10 11 part of biology. So I want to be very specific what we are talking about is the testing -- the sort of 12 13 testing on animals -- live animals the way Dr. Wynder 14 was doing it and so forth. 15 Q Let's put it --16 The inhalation tests, skin painting tests and Α

17 so forth. Let's put it in terms the jury can 18 19 understand. 20 When you say biological research, when we cut 21 through it, what we are talking about, in connection 2.2 with smoking and health anyway, you are talking primarily about animal skin painting testing for one, 23 24 is that correct? 25 That would be one. 03800 1 Number two, are animal inhalation studies, smoke inhalation studies, that would be another? 2 That would be another, yes. 3 Is there anything else you would include in 4 5 there? 6 That is my familiarity with it. There might Α 7 well be others, but not being the sort of person who does that sort of research, I couldn't tell you the 8 9 name of every kind of animal testing that gets done. 10 Q At least --That's the kind of research I have in mind. 11 Α 12 When we refer to biological research, we will understand that you are primarily referring to animal 13 14 inhalation studies and animal skin painting, is that 15 fair? 16 And things like that. The sorts of tests 17 that you would need to do in order to establish whether a product was safer or not. 18 That's fine. Is it my understanding that you 19 20 believe that there is an agreement not to do that type 21 of biological research -- that type of research you 22 just described? 23 Yes. I think there was an agreement not to 24 do that type of research. I understand that. The problem with that 25 03801 1 agreement, according to your testimony is, you believe 2 that would have an anti-competitive effect of slowing 3 down the development of safer cigarette products? 4 I think that helped. I think that was part 5 and parcel of this bigger collusive scheme -- it was part of that bigger collusive scheme to resist 6 7 competing on the basis of safety or health, yes. 8 Well, this actually was a separate 9 arrangement, was it not? 10 I think all four of these strands are all 11 part of a larger -- of a large conspiracy or cartel 12 agreement not to compete on the basis of health. 13 There is specific language about that particular one, 14 that one gets mentioned by name, by people in the 15 industry as the gentlemen's agreement, as one of the 16 two gentlemen's agreements. 17 But I think to separate it out and say this 18 is a collusive arrangement, and number one is a 19 collusive arrangement, and number two -- to think of 20 them as four separate collusive arrangements is 21 probably to misinterpret my views on this. They are 22 all part and parcel of one grander scheme to suppress 23 competition on the basis of safety in cigarettes. 24 You understand I am not trying to 25 misinterpret -- you understand I am reading from your 03802 1 chart, you understand that?

2 Yes, I understand you are reading from my 3 chart, yeah. 4 And on this third arrangement that you have 5 put number 3 next to? 6 Α Yes. 7 You told the jury what you thought the harm was, if you had this type of agreement there is no way 8 9 to test potential safer cigarette products with 10 animals? 11 A If people stick to the agreement, that's 12 right. 13 Now, my question to you is -- strike the question. Would you please tell me -- strike the 14 15 question. 16 You put a date next to the first two 17 agreements, 1953, Plaza Hotel? 18 Yes. 19 Can you just tell me so I know what date or 20 what year do you pinpoint Philip Morris entering into 21 this arrangement? 22 I can't pinpoint it to the year, because I 23 haven't seen a document that says when the arrangement 24 started. 25 Q Can you get a decade? 03803 1 Again, I can't tell you when it started. I can tell you it was by 19 -- I will have to think 2 about the document. I will have to think about when 3 it was that Helmut Wakeham, who was the head scientist 4 5 at Philip Morris, said there was such an agreement. I 6 think it was in the 1960s. Certainly by the 1960s --7 it will come to me which particular year it was. 8 If this helps you, Doctor, I will represent to you on August 31, in your deposition, you said you 9 believed it took place around 1963 or 1964. 10 Does that help you? 11 12 I'm going to have to think carefully and try to remember the date of the document that I am trying 13 14 to cite. 15 As I sit here at the moment -- maybe it will 16 come to me. But as I sit here at the moment I think 17 that is when I would date it. 18 I just want to make sure. Is it your best 19 recollection that you pinpoint the date that this 20 agreement took place around 1963 or 1964? 21 No. Let me be very specific. I don't know 22 when this gentlemen's agreement started. I know by --23 at some point, and I am just trying to remember the 24 date of the document. But at some point Dr. Wakeham 25 refers to the gentlemen's agreement. And so I know 03804 1 that by that time -- by that time I believe the agreement had been entered into. But I can't -- I 2 3 don't know when precisely it started. 4 Let me summarize, and I think I have it now. 5 You don't know exactly when Philip Morris entered into it, but by 1963 or 1964 Philip Morris was in the 6 7 agreement? Did I say that correctly? The only thing is, I am trying to recall the 8 9 date of the document. And I will try to refresh my memory. But there is certainly a date at which Helmut 10 11 Wakeham talks about the gentlemen's agreement. At 12 this point he wants to -- he is concerned that it is

breaking down and he wants to start cheating on it 13 14 himself. 15 Certainly by the date of that document, and I 16 will just have to refresh my memory as to the particular date, certainly by that point I believe 17 18 that Philip Morris is involved in this agreement. THE COURT: We will see you at 1:30. 19 20 (Luncheon recess.) 03805 1 (Afternoon session.) 2 (Jury not present.) 3 MR. FERGUSON: I need just a moment for a situation that may develop with Dr. Solow. We were 4 hoping it wouldn't, but it looks now like it might. 5 6 Dr. Solow informs me he absolutely has to be back in Iowa this Wednesday, so he needs to leave tomorrow. 7 That means if we are not concluded, either defendants 8 9 don't conclude their cross or we haven't concluded 10 redirect, we are going to have to ask the Court to let 11 him go and bring him back at some later time to 12 conclude. 13 We have kept him here, going on two and a half weeks, he has classroom responsibilities we have 14 15 to get him back to. 16 THE COURT: Just so I am not jumping back and 17 forth, what is your estimate at this point about 18 redirect? 19 MR. FERGUSON: Thirty minutes. 20 THE COURT: Okay. 21 And what is the defense collective estimate 22 about further cross? 23 MR. WEBB: Your Honor, I think my cross may 24 be done in an hour to an hour-and-a-half, approximately. I will just try and do the best I can. 25 03806 I have cut a lot of material out. Understanding what 1 2 the rest of the defense is, generally, it looks to me like we would finish cross-examination by the end of 3 today, maybe an hour into tomorrow, to give you a 4 5 rough approximation. 6 So with a thirty minute redirect, it looks to me like we will be done. 7 MR. FERGUSON: I hope that's the case. I 8 9 just wanted the Court to be aware that that 10 possibility exists. 11 MR. WEBB: I will say for some we are not 12 done, I have caucused with my co-counsel here, we have 13 very strong objections to allowing this witness to 14 just leave in the middle of his examination and not 15 complete his examination. I hate to argue that at 16 this point and take up your Honor's time. I guess 17 prudence dictates I hold that argument, unless you 18 want to hear about this now. 19 MR. FERGUSON: I think this may occur with 20 other witnesses. I don't expect this to be a unique 21 situation with Dr. Solow. We do ask for the defendants' understanding. We would be happy to 22 23 extend that to them should this develop with their 24 witnesses. 25 MR. WEBB: I told the plaintiff earlier, when 03807 1 we interrupted for Mr. LeBow, we will accommodate them 2 to do that. But that is a lot different -- I mean --

to accommodate a witness for half a day in that case to do another witness versus -- I mean -- are you talking about bringing him back a day or two later?

MR. FERGUSON: We would have to certainly check with Dr. Solow's availability. He anticipated going on a week ago last Monday. As a result, as I say, he has been here for two and a half weeks.

Your Honor, if we don't have a lot of repetitive questioning this afternoon, and tomorrow morning, perhaps we can make it. I am hopeful that we will. But I think we have some obligation to accommodate Dr. Solow's schedule. He has been here a long time and he does have responsibilities at the university.

THE COURT: Anything further? MR. FERGUSON: No, sir.

THE COURT: It seems to me that we've got to deal with this issue a witness at a time. And what may be appropriate in Dr. Solow's case may or may not be appropriate as we face other witnesses. There may be accommodations that the parties feel are possible for certain witnesses and don't feel are possible, at least in terms of an advocacy position, for other

witnesses. So I'm not requiring either side to look at the big picture quite yet.

I will say at this point Dr. Solow, according to my numbers, has testified on plaintiff's side of the case, let's see, 290, 270, 35 and 5. Actually some of those -- the caveat I guess on both sides -- I see Mr. Berman looking puzzled, where does the 5 come from. I think you must have opened your mouths and said something that led me to give you five minutes.

This is the days that he has been on the stand on each side, so that I guess you would have to discount on each side by a small number of minutes. But the days that he has been on the stand are, as I indicated, for plaintiff.

For defendants it is 520 last week, and then we have this morning, and are facing significantly more examination. It seems to me that the possibility exists, and I want to see what the parties' positions are as it relates to -- as those positions relate to this witness, notwithstanding the overall long allocations of time to each side, but to look at suballocations for particular witnesses, as long as those are quite generous.

In this case I can see that based on the defendants' penciling in of the time expected and 03809

adding to that some significant length of time, that we can come to a result that allows plaintiff to have the redirect outline, plus a little bit more just for cushion. And the defendants have plenty of cross-examination, and for me to define that in a way that doesn't punish either party, that gets Dr. Solow out of here, as he anticipates needing to be out of here, tomorrow.

When is the last time he could leave consistent with his plans? Maybe can I ask him directly.

12 MR. FERGUSON: I think it is better to ask 13 him directly.

14 THE COURT: When do you need to be out of here to catch a flight? 15 THE WITNESS: I haven't looked at the flights 16 17 yet. I am prepared to spend the night in Chicago or 18 Denver to get back tomorrow morning. I had somebody 19 cover for me once, I have already had to move once. 20 If I have to move again next Wednesday I will have 21 serious problems. 22 THE COURT: So we have all tomorrow. I am 23 not saying I hope that. So it does seem to me -let's not universalize it, if we can avoid it. I can 24 25 direct that the defendants cross would be concluded by 03810 tomorrow morning. That is more than enough time for 1 2 what you have in mind. I'm not saying I am going to 3 do that on every witness, but that gives you the afternoon to redirect. I am not trying to force 4 5 anybody into a box, but it just does seem to me that 6 it is more than adequate. If you know that you are in 7 that situation, I think you will plan accordingly. MR. WEBB: I don't think there is any reason 8 to object to that. I don't want to sound defensive. 9 10 We have been faced with a witness that has testified 11 on direct in an extraordinarily broad way. We have 12 tried not to duplicate and take up time unnecessarily. 13 I am actually trying to cut back. But your Honor's suggestion seems reasonable to me. I haven't caucused 14 with my co-counsel, but based on what I understand 15 16 their plans of cross-examination to be, we should be 17 able to live within your Honor's suggestion. 18 MR. FERGUSON: Likewise, your Honor, I think 19 that is good from our perspective. I didn't intend to 20 -- if I was critical of defendants, I apologize for that. I simply wanted to call attention to Dr. 21 22 Solow's problems. 23 THE COURT: I hope everyone understands I was not being critical either. I believe he is an 24 important witness and is taking a lot of time, 25 03811 1 understandably. But it will be the Court's direction that the defense cross conclude by noon tomorrow at 2 latest, with the afternoon set aside for redirect and 3 recross if necessary. And I guess I will have to --4 in fairness to everyone I will have to look at the 5 6 issue, which I really don't anticipate, allocating 7 tomorrow afternoon even-handedly if we get to that, so 8 he is on his plane no later than tomorrow evening. 9 Anything else we should talk about? 10 MR. LUVERA: Yes, your Honor. Mr. Berman and 11 I have been debating which one of us gets to tie the 12 bell around the cat's neck, and he lost. We have a 13 problem with our next witness that we would like to 14 bring up. 15 THE COURT: Are you going to alternate 16 sentences here? 17 MR. BERMAN: I am the designated trouble 18 maker, I guess, on this witness, your Honor. 19 Again, I want to preface this, we are not 20 suggesting any fault on behalf of the defendants in 21 scheduling. They can use the clock any way they see fit. But in all honesty, we never anticipated 22 23 Professor Solow would go as long as he did. A fact 24 which he reminds me of daily. But -- so now we have

our next witness, who is Professor Donaldson. And 25 03812 1 Professor Donaldson believed that he would begin his testimony, originally when we noted him for this week, sometime on Monday. That was a week ago or so because 3 4 of how we scheduled things. I told him that late last week that I thought he might go on beginning Tuesday 5 6 morning. And now that is slipping. 7 Professor Donaldson has to be -- Professor 8 Donaldson teaches at Wharton. The only open two days in a row that he has until the end of November is this 9 week. But this Thursday -- so we have two and 10 Wednesday he would be done. But this Thursday he does 11 12 not have an open day. 13 One of the problems we have in putting on 14 this case, we don't have any employees so we have to rely on experts. All of our experts are highly 15 credentialed and highly busy. So Professor Donaldson 16 17 would have to miss a major speech he is planning on 18 giving Thursday, which he really, really cannot do. 19 He is the guy giving the speech. After that he only is available on single days. He teaches at Wharton 20 Mondays and Wednesdays. So he is available to finish 21 22 if we interrupted his testimony on a Tuesday or a 23 Thursday. And is he willing to do either. 24 So I am raising this because I want the Court 25 to know at the beginning that it now looks like we 03813 won't call Professor Donaldson until tomorrow 1 2 afternoon, if we are lucky. And that we would 3 probably go all of Tuesday and Wednesday on direct. And then he would have to leave. And we would bring 4 5 him back as soon as we could get the next free day for 6 7 So I raise -- what we were planning on doing Thursday, then, is playing Mr. Osdene's deposition, 8 9 which I know the Court has worked hard on and we will 10 finally get to. 11 THE COURT: How many -- this is a side issue, 12 but what does your edit of Dr. Osdene amount to, more 13 14 MR. BERMAN: I have someone doing it right now, and I haven't got to tell yet because they are 15 16 still playing around with the tape. 17 THE COURT: And how many hours would you 18 expect to be on Professor Donaldson's direct? 19 MR. LUVERA: Let me respond to that, your 20 21 I believe, based upon the document review that I have done, that if in fact we are going to take 22 23 the morning up with Dr. Solow, as if we are, then I am 24 going to take the remaining Tuesday, Wednesday up on 25 direct. That is a day and a half. 03814 1 MR. BERMAN: I suspect, based on what I know 2 is an outline, that they are going to have substantial 3 cross-examination. 4 MR. McCORMICK: Your Honor, I completely 5 understand scheduling issues. We will face them, too. 6 But this is not really a fair, livable situation. Dr.

Donaldson has to give a speech? Dr. Donaldson has a

conflict with us, he is supposed to be an important witness in a 2 billion dollar lawsuit. The speech

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takes precedence? I don't understand that. For them to be able to put on his direct examination -- and I would, when the jury is not waiting for us, perhaps at the end of the day, have an opportunity to address the evidentiary issues which we raised which I think will flush some more of this out.

1 2

To have them put on Dr. Donaldson and then have Dr. Donaldson leave for some indeterminate period of time before we've get our chance to cross-examine him in front of this jury is really just not fair. If he wants to participate in this lawsuit he has to make the time to participate in this lawsuit. If they can't accommodate us to do at least some reasonable direct examination, then they ought to put somebody else on who we can get done and who is willing to make himself available. But the idea they are going to

have him for a day and a half of direct examination, he is going to disappear off for some indeterminate period of time, we don't think that is a fair way to proceed and they ought to get somebody else in here to testify if they can't -- if Dr. Donaldson can't accommodate them.

MR. BERMAN: There is a number of responses to that, your Honor. Again, Dr. Donaldson -- we wouldn't have slotted him in if we thought this was going to happen with Professor Solow. Dr. Donaldson's appearance in Washington D.C. at this speech he was giving was something he scheduled over a year ago. And we wouldn't even have dreamed of it if we thought this was going to be a possibility.

Again, I am not casting aspersions on how they conduct their exam, but we didn't anticipate they would use more time than we took with Dr. Solow. That is kind of unusual. That is number one.

Number two, if we do finish direct and they don't have a chance to cross -- actually, they are advantaged, because rather than having to work on the cross at night they will have weeks to prepare a cross-examination outline for whenever he comes back. That is a situation I would love, if I were on the other side, rather than scrambling at night to get

ready. So I don't think they are seriously going to be prejudiced here.

I think that one thing we ought to consider, that Dr. Donaldson might be willing to consider -- of course the Court can order him to do whatever the Court wants, but he did say I have done the speech a year in advance. I could cause a lot of problems and try to get someone to substitute. But the question you asked me, would that be the end, if you closed on direct on Wednesday and they began cross on Thursday, would I be done? And I said I doubt that you would be done, which means no matter what happens his testimony is going to be interrupted and he is going to have to come back here.

So it is not like he is not going to be interrupted and come back. The following Monday we weren't planning on calling Dr. Donaldson, we were planning to start with our next witness, who was also scheduled. So we have got all these problems. And that's the situation.

MR. LUVERA: Might I make a small point? 21 THE COURT: Yes. 22 23 MR. LUVERA: In a normal trial we wouldn't 24 have this trouble. We could substitute witnesses. 25 Given the pre-designation arrangement we have it is 03817 really hard for us to substitute the way we would in a 1 2 normal case, because they are entitled to know what 3 exhibits, et cetera. And I note -- there was a 4 cartoon once showing two Roman gladiators who were 5 pouring boiling oil on them, you knew about the boiling oil when you joined up. I knew about the 6 7 rules beforehand, but I just wanted to say if it weren't for that, we could substitute and it would not 8 9 be a problem. THE COURT: The trial is difficult for 10 everyone involved. I appreciate that. I don't want 11 to seem unsympathetic, but I have never allowed the 12 13 interruption of a witness's testimony absent 14 agreement. And I don't think it is fair over 15 objection to have a witness testify to all or part of 16 the direct and then to return at some significant time 17 later to complete testimony. 18 Certainly I have allowed interruption of 19 testimony by the Court's direction or agreement for a 20 brief period of time to accommodate another witness 21 testifying. In fact, we have done that in this case. I am willing to do one of two things. I will listen 22 to you before I do the one that I am going to mention. 23 2.4 I have in the past, and am willing to consider in this 25 case, an even-handed allocation of a reasonable amount 03818 1 of time for the examination of a particular witness. In other words, the plaintiff could commit to a 2 particular length of time for Professor Donaldson's 3 examination consistent with his schedule. The 4 5 examination then would be directed to fit within that time. It would be a subset of the overall allocation 6 7 of time. 8 Now, obviously he is not an hour witness, 9 half hour for plaintiff, half hour for defendant. And 10 I would listen to defendants about their perceived needs for Professor Donaldson before allocating. But 11 12 it is possible to have that kind of an even-handed allocation of the time available this week. It 13 14 doesn't appear to be realistic that that time could 15 conclude on Wednesday, but it could conclude from what 16 I am understanding of the parties' needs on Thursday, 17 if I got and enforced a particular time deadline. 18 Absent that kind of imposed time limit, I'm afraid 19 Professor Donaldson and other witnesses will need to 20 stay available once they begin their testimony. 21 Certainly in his case if there was testimony 22 on Thursday and he needed to return on Monday, which 23 appears to be an open day on his teaching schedule, 24 that is a possibility. And we also may want to see before finalizing that exactly when we conclude with 25 03819 1 Professor Solow tomorrow. But let me at least 2 understand the parties' tentative positions about that 3 kind of allocation. 4 MR. LUVERA: If we could just have a moment

to talk. My big concern, and I certainly wouldn't

5

attribute any bad motives to the other side, but if 6 7 the cross-examination of Dr. Solow should continue for quite awhile longer than anticipated, that would 8 9 reduce the available time for this rather important witness. And that would be my concern. But can I 10 11 just speak to --THE COURT: Sure. I guess I have already 12 13 addressed that to some extent by the noon tomorrow deadline. 14 15 MR. WEBB: Can I possibly make a suggestion? 16 THE COURT: Yes. MR. WEBB: We will get Dr. Solow done 17 pursuant to your Honor's scheduling, but could we 18 19 caucus and deal with the Dr. Donaldson situation at 20 4:00 and go ahead and start with Dr. Solow, because we 21 will need to caucus on this issue. 22 THE COURT: That's fine. The plaintiffs may want to think it over. And you may also want to check 23 with Professor Donaldson. Let me tell you another 25 wrinkle here, we have talked about Friday, I don't 03820 1 know how that fits into everyone's schedule this week. And I have to check something because there is a death 2 3 penalty case that is beginning that Judge Armstrong 4 has beginning. They want to use this courtroom. And 5 I told them they could, not having heard about this situation on Friday. In fact, I admit I suggested it 6 7 for the mass initial voir dire. That would not necessarily take all day. And if Friday became an 8 9 important issue for this trial we could try to 10 coordinate -- as of now they are scheduled for the morning, it is possible we could shoehorn that in at 11 12 another location or have this trial in session on 13 Friday afternoon, if absolutely necessary. So why don't we follow up Mr. Webb's 14 15 suggestion and you take all the permutations and kind 16 of know where I am on the overall issue and we will 17 get the jury in here and get Professor Solow out of 18 here, we hope. 19 (Jury present.) 20 THE COURT: Good afternoon. Please sit down. 21 MR. WEBB: May I proceed, your Honor? THE COURT: Yes, please. 22 23 BY MR. WEBB: 24 Dr. Solow, when we took our noon luncheon 25 recess I was asking you questions about the third -- I 03821 started to ask you questions about this third 2 agreement. And we were talking about that. 3 Do you recall that, sir? 4 5 And just so I can have a time frame to ask 6 you questions then, you were going to check to tell me 7 what year, or approximately what year by which you 8 believe Philip Morris had entered into this collusive 9 arrangement that you put as number 3 on this chart. 10 Still, to the best of my knowledge, is by 11 1963 or '64 they were involved in this arrangement, 12 yes. 13 And therefore, as far as my client is concerned, Philip Morris, am I correct that if you 14 15 believe this, they were part of this agreement by 1963 16 or 1964, I take it you would have actually examined

the evidence to see whether or not Philip Morris 17 18 actually did any live animal research after 1963 or 19 1964? 20 Α That's part of it, yes. And did you examine the evidence to see 21 2.2 whether or not Philip Morris in fact did live animal research after the date you say they had entered into 23 24 this agreement? 25 Α Yes. 03822 And did you find that Philip Morris in fact 1 had -- did in fact do a substantial amount of mouse 2 skin painting testing as well as smoke inhalation 3 studies after the date you say they joined this 4 5 agreement? 6 Α Yes, I think there was some going on, yes. 7 And do you agree, as an economist, that once 8 you saw the evidence that in fact Philip Morris did a 9 substantial amount of live animal testing after the 10 date by which you say they were in this arrangement, did that indicate to you that maybe there was a 11 possibility that they were never in the collusive 12 agreement in the first place? 13 14 A No, I don't think that follows. 15 As an economist, Doctor, do you believe that 16 if a few people agreed to rob a store, and then you 17 found out the store never was robbed, would that indicate to you that maybe there was never an 18 agreement to rob the store in the first place? 19 20 I suppose it would depend on what evidence 21 you had about their agreement if the first place. In collusive agreements there is -- as I tried to explain 22 23 to the jury, there is an incentive to complete on the 24 agreement. 25 What you call cheating would just as well be 03823 1 evidence that the agreement never took place in the 2 first place? 3 If there were no evidence that there was an 4 agreement. 5 Did you see evidence that Philip Morris in fact did a substantial amount of live animal testing 6 7 after 1963 and 1964? 8 I believe they did some, yes. 9 And, again, we are defining live animal 10 testing to include, among other things, mouse skin 11 painting and animal inhalation studies, is that 12 correct, based on your definition? 13 Yes. 14 I am going to hand you a document that is in 15 evidence that is marked as Defense Exhibit WX130. I 16 am also going to put it on the screen for the jury. 17 Whatever is easier for you to follow, but I am going 18 to put this up on the screen now for the jury. I will 19 try to get this focused. 20 Do you see -- did you actually see this document reporting on some Philip Morris animal 21 22 studies after 1963 and 1964, sir? No, I don't believe I have ever seen this 23 24 document before. 25 Q Let's look at what it is. Let's go to the 03824 1 first page of it.

```
2
               Do you have the first page in front of you,
 3
      sir?
 4
        Α
               Yes.
5
         Q
               What we see from the first page of this
      document, that this is project 6900, physiological
6
7
      studies. The time period covered is October 1966 to
      April 1967. I think that is April 10th.
8
9
               Do you see that?
10
               Yes.
        Α
11
         Q
               And the date of the report is May 9th, 1967?
12
13
               And -- did you learn that Mr. Carpenter is a
     research scientist at Philip Morris?
14
              Yes.
15
        Α
16
         Q
               And if we look at this -- let's just read
17
      part of this so the jury can -- this is after you say
      Philip Morris had joined in this collusive agreement
18
      not to do animal research?
19
20
        Α
21
               I will back this up just a little.
               MR. LUVERA: I missed the number.
22
               MR. WEBB: I'm sorry. It is number WX130.
23
24
     BY MR. WEBB:
25
               It says, the objects of this project are to
        Q
03825
1
      develop and apply to cigarettes biological tests which
2
      have meaning in the area of smoking and health.
3
               Do you see that?
 4
               Yes.
 5
         0
               Does that appear to be the type of testing
 6
      that you said Philip Morris has agreed not to do?
7
               Yes.
8
               And it says that there is going to be mice,
9
      guinea pigs, cats and monkeys, and I have trouble
      reading that, have been used, I believe that says,
10
      with in vivo procedures.
11
12
               Do you see that?
13
               Yes.
        Α
14
               Have you come to believe that in vivo means
        0
15
      live?
16
        A
               Yes.
17
              These tests were performed by researchers in
      contract laboratories, where qualified staffs and
18
19
      adequate facilities for animal are available.
20
               Do you see that?
2.1
               Yes.
         Α
               There are three methods for which are being
22
23
      sought, lung cancer has been widely acclaimed as
24
      being --
25
        Α
              Caused.
03826
1
               Maybe it is -- being caused by cigarette
      smoking. More recently cardiovascular disease and the
2
 3
      respiratory disease of chronic bronchitis and
 4
      emphysema have been added to the list of strong
 5
      indictments against smoking. We are actively seeking
 6
      -- what is that word?
 7
               I cannot read that word.
 8
         Ο
               I can't either.
 9
        Α
               It could be tests. It could be tests.
10
               We are actively seeking, we will say tests --
11
      we could be wrong, leave a blank spot -- which will be
12
      meaningful in the areas of cancer and other
```

respiratory diseases, but we have no tests under study 13 14 for cardiovascular disease. 15 Do you see that? 16 Yes. Now, it would appear that Philip Morris is 17 18 talking about doing live animal research inconsistent 19 with the collusive agreement you told us about? 20 A It would appear by 1967 they were cheating on 21 that gentlemen's agreement, yes. 22 Q Or it could be the case that there never was 23 an agreement in the first place? 24 If that's all there were and there were no 25 mention of the gentlemen's agreement, for example, and 03827 1 things like that. 2 By the way, it is also not clear that this is in house. This is in contract laboratories. 3 Let me just make sure we clear that up, 4 5 Doctor. The point you are trying to make is --6 whether Philip Morris does its biological research in 7 its basement or across the street in another laboratory, if they felt there was another laboratory 8 9 that could do it better, the fact is Philip Morris is 10 still doing the research, isn't it? 11 No. I think in one case Philip Morris is 12 doing the research and in the other case they are paying someone else to do the research. 13 For their research? I'm sorry? This is 14 research being done for Philip Morris? 15 16 Being done for Philip Morris, but it would be 17 being done by someone else. As Janet Brown said, there were good reasons to do things in house as 18 19 opposed to doing them at other places. But there is also -- there is also good 20 reasons why a company like Philip Morris might decide 21 22 to do animal research at another laboratory, is that 23 fair to say? 24 If they didn't think they could do as good a 25 job, that could be another reason. 03828 1 Did you learn, in preparing for your 2 testimony in this case, that these -- particularly these inhalation studies where they try to get animals 3 4 to smoke are very difficult experiments to carry out? 5 No, I had no idea how easy or difficult they 6 are. 7 You saw no evidence they are difficult? 8 I don't know how difficult, no. 9 The point you were making in your testimony 10 is that if you don't do animal research you may not be able to test safer cigarettes, is that correct? 11 12 I think if you want to make a claim that a 13 product is safer or doesn't cause cancer in the usual 14 tests, you have to be able to have the tests, you have 15 to be able to perform the tests. If you can't perform 16 the tests, you have difficulty supporting the claims. 17 Let's see what Philip Morris was doing. 18 Let's just look. Let's start with -- this is called the 19 20 primate inhibition study. 21 Do you see that, sir? 22 23 Primates -- right away it talks about a

```
24
      certain type of monkey. I won't even try to pronounce
25
      that word. Do you see what they are talking about
03829
1
     there?
2
        Α
              Yes.
3
             Were given cigarette smoke for a period of
      eleven months and showed no observable microscopic
4
 5
     changes. Three of the six monkeys died during the
     period, presumably because of extreme high carbon
6
7
     monoxide levels and trauma. The smoking monkeys did
     exhibit shortness of breath when they attempted to
8
9
     avoid being caught following their exercise periods --
     following their exercise periods. A fourth monkey was
10
      sacrificed before the end of the study because of
11
12
     problems unrelated to smoke exposure.
13
              Do you see that?
14
              Yes.
        Α
15
              That is a primate smoking study, is that
16
      correct?
17
       A
              Let's look at the next one. Long-term mouse
18
19
    skin painting.
20
              Do you see that?
21
        Α
              Yes.
22
              That's the type of research you said they
23
      agreed not to do as part of the collusion, right?
24
25
              It says they did a two-year skin painting
03830
     program beginning in April 1965.
1
2
              Do you see that, sir?
3
              Yes.
        Α
4
              It was terminated at twenty-one months. The
5
     histiopathology and the final report are expected
      about June 1, 1967.
6
7
              Do you see that, sir?
8
              Yes.
        Α
        Q
9
              I asked that question. Let me go on.
10
              Can we go on and read that?
       A
11
       Q
             Yes. Where are you, Doctor?
12
             I was just going to read the next sentence.
       Α
13
             Do you want to read the next sentence?
        Q
             No, it's all right. Fine. Sorry. I'm
14
        Α
    sorry. I have never seen the document, so I am just
15
16
     reading it.
17
             I will go as slow or as fast as you want.
18
      But if you want to stop, we will read anything you
19
      want. What I am trying to show you is this, they did
20
      a lot of animal testing. Do you see number C.
21
              Do you see C?
22
        Α
              Yes.
23
              C is another mouse skin painting test, is
24
      that correct?
25
            Yes. Apparently.
03831
              It is used by investigators to screen
1
 2
      chemicals for carcinogenic potential.
 3
              Do you see that?
 4
        Α
              Yes.
 5
              We have abandoned the test because we found
 6
      it to be insensitive and inaccurate with pure
 7
      compounds.
 8
        A Yes.
```

```
9
              You will agree that is a live animal testing,
10
      is that correct?
11
              Apparently, yes.
12
              Let's go to the next one. The next one is
13
      carbon monoxide uptake.
14
               Do you see that, sir?
               Sure. Yes, I see that one.
15
16
               It says in this one, inhaled substances which
17
      are irritating to lung tissue frequently cause changes
18
      in the permeability of the alveolar walls, resulting
19
      in lower diffusivity for gases which are exchanged
20
      between the alveolar air and blood.
              Do you see that?
21
22
              Yes.
23
              Let's go on and see if this was animal
24
      testing that was done.
25
              A Study to test this effect with cigarette
03832
1
     smoke has failed to date because of the high level of
2.
      carbon monoxide in the smoke. It was not possible to
      expose the animals to a high enough smoke
3
4
      concentration to cause changes which lasted longer
      than the time necessary for the carbon monoxide level
5
6
      resulting from the smoke to be lowered sufficiently to
7
      allow the uptake rate determination.
8
              Do you see that, sir?
9
              My point is, that is animal testing, is that
10
11
      correct?
12
        Α
              Apparently, yes.
13
              Let's look at the next one. Non-neonatal
     mouse testing. Recently efforts have been made to
14
      shorten the time required for testing carcinogens by
15
      the use of newborn mice. We have conducted a pilot
16
      study to determine the tolerance of newborn mice to
17
18
      whole cigarette smoke condensate. The condition for a
19
      full scale study has been established.
20
              More animal testing, sir?
21
        Α
              Yes.
22
              Look at the next one. A mucus flow test.
23
      This is with cats. Do you see that, sir, a six month
24
      study in progress with cats, which are equipped with
      tracheal windows. The study is at the mid point with
25
03833
     ninety percent of the cats in good condition.
1
2
              Do you see that? Can you read that?
3
              I'm sorry. I was reading the one above.
4
      sorry.
5
              I will slow down.
            I'm sorry. You just had me lost in the
 6
7
      document. I see it, yes.
8
              That is another animal study, is that
9
      correct, sir?
10
             Yes.
11
        Q
              Apparently cats?
12
              Yes.
        Α
13
              The document then goes on to discuss each of
      those in more detail. Why don't you look -- does the
14
15
      document go on to discuss each of those animal studies
16
      in more detail?
17
      A I'm sorry, it's taking me a while. It is
18
      hard for me to read the document.
19
              I am not going to rush you. We can go into
```

```
20
      more detail if you want. My only question is, if you
      look at the pages does it appear that Philip Morris is
21
      discussing these animals in a little more detail in
22
23
      the pages that follow?
24
        Α
              Yes, it does.
25
              Okay. Now, each of those live animal studies
03834
1
      are the type of studies that you say Philip Morris
2
      agreed not to do sometime around or before 1963 or
3
      1964?
4
              I think they had agreed not to do it prior to
      that. By 1964, I became first aware that -- it is
 5
      from documents written in 1963 or 1964 that I became
 6
 7
      aware that Philip Morris was engaged in the agreement,
8
     that's correct.
9
              Let me show you some later studies as we go
10
     further down the road here. Let me show you 1968.
11
      I will hand you a document that is in evidence as
12
      Defense Exhibit WS499. Let's look at the first page
13
      and show the jury what it is.
14
              Do you have the front page in front of you?
15
        Α
              This is a document that shows a smoking study
16
       0
17
      on a certain type of monkey?
      A Apparently so.
18
19
              It says it is the final report?
        Q
20
             Yes.
        A
21
             It shows the name of the laboratory that
22
      Philip Morris had to do the work?
            Yes.
23
24
              It is called Hazelton Laboratories. Do you
25
      see that?
03835
1
              Yes.
              Have you learned in connection in preparing
2
      for your testimony in this case that Hazelton
3
 4
      Laboratories was one of the premier laboratories at
5
      that time in the United States that could do that kind
      of test?
6
7
        Α
              No.
8
              You are not familiar with Hazelton at all?
9
        Α
10
              Let's look at the first page. It says it is
11
      a chronic forty-eight week smoking study. These
      certain monkeys. Final report. And it is submitted
12
13
      to Philip Morris July 18th, 1968.
14
              Do you see that?
15
16
              Does this appear to be the type of animal
17
      biological -- live animal study that you say Philip
18
      Morris had agreed not to do?
19
              Yes.
        Α
20
              Let's give the jury a sense -- this is a
21
      lengthy report. I don't intend to go through the
22
      whole report with you. But just to show you the type
23
      of biological research Philip Morris was doing in
24
      1968, the first page reflects that this is dated July
25
      18th, 1968. It says is a final report on this
03836
1
     monkey study. Let's just read the summary and see
 2
      what it says.
 3
              This study was conducted for the purpose of
 4
      attempting to define and characterize the effects, if
```

5 any, in Cynamolgus monkeys, following these forty eight weeks exposure to cigarette smoke. Six monkeys, 6 7 two males and four females, served as controls. And 8 six members of the monkeys, three of each sex served as test animals. Each animal was restrained in a 9 10 special chair and fitted with a face mask. At various daily intervals lighted cigarettes were placed in 11 12 special holders attached to the mask of the test 13 animals. 14 Do you see that, sir? 15 Α That is live animal testing, is that correct? 16 0 17 Α Let me just go over here and show you some --18 19 this is on page 3. It says the negative results of 20 the experimental procedure were more important than 21 the changes found. In particular the lack of alteration to the respiratory mucosa, which could be 2.2 23 attributed to exposure to tobacco smoke, was of 24 considerable interest when compared to reported 25 findings in human cigarette smokers. 03837 Equally impressive was the lack of consistent 1 2 bronchiolitis or bronchitis since this lesion has been 3 strongly supported as an etiologic factor in the 4 development of emphysema. 5 Do you see that, sir? 6 Yes. Α 7 Now, let me show you another animal study beyond this one. If there is anything else in that 8 9 document you want to look at you should feel free to 10 do so. 11 I have never seen it before. It is a long 12 document. I will probably not try to read it all 13 here. Let me show you another one, Doctor. And I 14 15 don't happen to have a copy of this. But we will try to do it on the screen. This is Defense Exhibit 16 WS242. And I believe -- let's see what it is. I 17 won't characterize it. The heading on it says Toward 18 19 a Cigarette With Lower Biological Activity. Model 20 studies. A cooperative research program, American 21 Health Foundation and Philip Morris USA, progress 22 report, January 16th, 1976. 23 Do you see that, sir? 2.4 Yes. Α 25 Is this collusive agreement still going on at 03838 1 this time not to do live animal research? 2 A I think by this time there is a fair amount 3 of cheating going on in this agreement, yes. 4 Or there is no agreement at all? 5 I don't think that's the case, but -- there 6 are other documents where they continue to talk --7 where the industry continues to talk about the 8 gentlemen's agreement at this point in time. There 9 was certainly a fair amount of cheating on it. There 10 was certainly a fair amount cheating on if, yes. It is just like the CTR, when we were talking 11 12 about CTR, instead of looking at documents, did you 13 look at what CTR actually -- do you agree it is fair 14 here instead of looking at documents it is important 15 to see what the companies actually did as far as

```
16
     biological research?
       A To some extent, yes. But I think my position
17
18
      throughout has been there was an agreement, and at
19
     points in time the firms were not doing this sort of
      research. I think -- as people started to cheat on
20
21
      that agreement you saw -- you see this kind of thing
22
      coming out.
23
              Well, let's look at what this kind of thing
24
      is. Actually it is interesting if we go over to the
25
      -- the next page which says copies, we see an old
03839
      familiar name there, don't we, Dr. Wynder?
1
2
              Yes.
 3
              You see he is with AHP -- I'm sorry, AHF, the
 4
      American Health Foundation?
5
        Α
              Yes.
 6
              Does it surprise you that Philip Morris is
        Q
7
      actually doing live animal biological research in
8
      cooperation or in conjunction with Dr. Wynder?
9
              Not necessarily, no.
10
              Did you know that before you reached your
11
      opinion that there was this collusive arrangement
12
      number 3?
13
               I think I was aware that some of the
14
      companies tried to get Dr. Wynder to work with them,
15
16
              And he did work with Philip Morris on this
17
     project. Do you see that?
              Apparently, yes. I haven't seen this
18
19
     document.
20
             You want Philip Morris to be doing live
21
      animal research, according to your testimony, right?
22
      A Yes. And making use of those results to
23
      compete actively in the marketplace with healthier
24
      cigarettes.
25
               Let's just see what this study was about.
03840
1
      The objective of the cooperative PM, that is Philip
      Morris, AHF study -- that is the American Health
2
3
      Foundation, sir?
4
        A
              Yes.
 5
              -- is to determine whether chemical
      composition of three experimental cigarettes varied
 6
 7
      significantly and whether such variations would be
8
      reflected in biological activities.
9
              Do you see that?
10
        Α
              Yes.
11
              They are testing experimental cigarettes?
        Q
12
        Α
              Yes.
13
              That's what you thought they should be doing,
14
      right, if there was not this collusive agreement?
15
             And then competing actively with them on the
16
      basis of health, yes.
17
             Bioassays for this purpose are tests on mouse
18
      skin for complete carcinogenicity and for tumor
      promoting activity, as well as inhalation studies with
19
      Syrian golden hamsters, is that correct?
20
21
              That's what it says, yes.
              Those are live animal tests, is that correct?
22
        Ο
23
        Α
              Cigarettes were submitted for chemical
24
25
      analytical profiles and representative tar,
03841
```

A-l-i-q-u-o-t-s, from bioassay materials will be 1 2 analyzed at certain intervals. 3 Do you see that? 4 Yes. This is the type of testing you believed 5 6 Philip Morris would not be doing if they had this 7 collusive agreement? 8 If they had managed to make that collusive 9 agreement stick for all time, then I think they would 10 not have been doing that. 11 Let's go through quickly. For example, the 12 inhalation study, it appears they used golden hamsters to do the inhalation study? 13 14 Yes, apparently. 15 And then it describe describes how hamsters 16 are exposed to mainstream smoke. Do you see that? 17 Yes. Α Let's go over a couple more pages to look at 18 19 the results. I have highlighted in yellow, we are 20 talking about some of the results from this animal 21 testing? 22 Α Yes. 23 It says we found also that the tar 24 depositions on the hamster larynx and in their trachea 25 and lung is determined by the tar delivery of the 03842 1 cigarettes. 2 Do you see that? 3 Α Yes. 4 And then it goes on to talk about the 5 long-term inhalation studies. It says we started the hamster inhalation study back on October 7th, 1975. 6 7 As was agreed upon, we have the following groups. And 8 then they describe the groups of hamsters they were 9 using. Do you see that, sir? 10 11 Yes. Α 12 Let's go over to the next page. They also 13 talk about doing mouse skin painting testing. Do you 14 see that, sir? Can you read that, bioassays on mouse 15 skin? 16 Yeah. Α Go ahead. That appears to be mouse skin 17 Q 18 painting? 19 Α Appears to be, yes. 20 And do you agree that conduct is not 21 consistent with your theory that there was a collusive 22 agreement? 23 No, I would not characterize my testimony 24 that way, no. I would say that that conduct is 25 consistent with a certain amount of cheating on that 03843 agreement, but certainly there are were times prior to 1 2 this when we weren't doing that kind of testing and 3 where Dr. Wakeham wanted very much to do that kind of 4 testing in-house, but was not able to do it because his superiors felt that that was not a good thing to 5 6 do given the agreement that they had reached. 7 Ο Their idea of cheating -- was there another 8 collusive agreement to cheat? 9 No. And in a collusive agreement there is 10 always an incentive to cheat on the collusive 11 agreement. Because if others are not providing the

goods and services that the customers want, or doing 12 13 the things that it takes to provide the goods and services that customers want, and you can do that, 14 15 then you can gain a competitive advantage from doing so. So there is an incentive to cheat. 16 17 Let's talk about the bottom line. Would you please tell the jury what safer cigarette product was 18 19 slowed down or not developed by Philip Morris because 20 of failure to do animal studies that you think should 21 be done? I'm not sure what Philip Morris would have 22 A 23 come up with had they done this more rapidly. Not Philip Morris, particularly. 24 25 Well, I represent Philip Morris. 03844 1 Α I understand that. So you don't know -- can you not identify a 2 3 safer cigarette product that was slowed down or not developed because of the failure to do this live 4 animal testing? 5 I am trying to think about Philip Morris's 6 particular products. I don't know what Philip Morris 7 -- no, I can't -- in fact, I don't know that Philip 8 9 Morris has presented a safer product in this time 10 period that we are talking about at all. They haven't 11 produced any of them. 12 Are you familiar with the cigarette called 13 Next? 14 Α Yes. 15 0 That removes nicotine? 16 Α Yes. 17 Did you believe that to be a safer cigarette Q 18 product? That is not clear to me that is a safer 19 A 20 cigarette product. 21 Are you familiar with the Accord cigarette? Q 22 Vaguely, yes. Α Q 23 Have you studied the Accord? 24 I know a little bit about the Accord, yes. Α 25 Q Does it seem to reduce biological activity? 03845 I am not aware if it does or doesn't. 1 Α You haven't studied it to that extent? 2 3 Α I don't know very much about Accord at this 4 point. 5 So do you know if the development of the Accord cigarette was slowed down because of the 6 7 inability to do animal testing? 8 I think the Accord -- as I understand it, the 9 Accord is based on -- things that were known quite a 10 long time ago, say in the 1960s, and it is just out on 11 the market now in 1998. 12 So it is entirely possible that that was 13 slowed down by a refusal of the industry to do 14 testing, to delay the amount of testing that it did, 15 yes. 16 When you say it is possible, did you see 17 evidence -- did you see evidence that Philip Morris was slowed down in developing an Accord because they 18 19 didn't do these animal tests? 20 A I haven't seen a document why Accord was 21 produced when it was produced. It is very new. 22 So my question is, have you seen any evidence

```
23
      -- any evidence at all that indicates to you that the
24
      development of Accord was slowed down because Philip
      Morris refused to do animal tests pursuant to number
25
03846
1
2
               I have not seen a document that says that,
3
      no.
4
              Thank you. Let me go to the fourth agreement
5
      you have on your chart here.
 6
       A
             Okay.
7
              This is another collusive agreement you have
8
      wrote on the chart, is that correct?
9
            That's correct.
10
             It is the collusive arrangement to share
11
     breakthrough on safe products, is that correct?
12
        A
              That is correct.
13
              Let's talk about that collusive agreement you
14
     have talked about in your testimony. If I understand
15
      your testimony, you contend that the tobacco companies
16
      had a collusive agreement to share in technological
      breakthroughs that might lead to the development of a
17
      safer or safe cigarette, is that correct?
18
19
           I'm trying to think. Could you repeat the
20
      characterization?
21
      Q Let me slow down.
22
             Please.
23
             If I understood your testimony, you were
      telling the jury when Mr. Ferguson was asking you
24
25
      questions, that you believed the tobacco companies had
03847
      a collusive agreement to share any technological
1
      breakthroughs that might lead to the development of a
2
3
      safer or safe cigarette, is that correct?
              I think that is about right, yes.
4
              If in fact a tobacco company actually
5
6
      discovered the ultimate safe cigarette that was
7
      quaranteed not to cause human disease, based on some
     breakthrough discovery, would it not be in the public
8
9
      interest for that discovery to be shared with the
10
     other cigarette companies so that all companies could
11
     manufacture those safer cigarettes?
12
              If that would be the result. I doubt that
     would be the result. But if that would be the result,
13
      as a matter of economics, I don't think that would be
14
15
      the result.
16
              I always remember reading -- Dr. Jonas Salk,
17
     who discovered the polio vaccine. Have you heard
18
     about him?
19
20
            You heard he refused to patent the discovery
21
      and made it available so the world --
        A Yes.
22
23
              -- people could buy it and have their
24
      children cured of polio?
25
        A
             Yes.
03848
        Q
              Was that a bad thing he did?
1
 2
        Α
 3
        0
              Did that destroy competition?
 4
       Α
 5
              Well, if the tobacco companies decided that
 6
      they actually -- strike the question.
 7
              Did you see evidence as you were preparing
```

8 your testimony that the tobacco companies actually 9 went to the federal government and told the federal government that if they ever discovered the true 10 11 breakthrough that they were going to share it with each other. Did you see any evidence of that? 12 13 No, that I'm aware of, no. Do you think that might affect your opinion 14 15 as to whether there was any actual arrangement that 16 the tobacco companies believed in any way was improper 17 or illegal? 18 Α No. 19 Normally if people are involved in collusive 20 conduct that is improper, do they go tell the 21 government about it, based on your experience as an 22 economist? 23 No, typically you don't tell people about 24 your collusive agreements. 25 Well, let's look at this. I have an extra 03849 1 copy so I will give it to you. Dr. Solow, I am now handing you what is marked and in evidence as Defense 2 Exhibit AM604. I will put this on the screen so the 3 jury can see what we are talking about here. 4 5 The heading on this document reflects that --6 this is -- Defense Exhibit AM604. This says, this is 7 a conference at the office of the Secretary of Health Education and Welfare, May 2, 1968, 4:00 to 6:00 p.m. 8 9 Do you see that? 10 Α Yes. 11 Q Have you seen this document before? 12 Α No. 13 No one showed this document to you? Q 14 No, I have never seen this document before. Did you ask the State to show you any 15 documents that might indicate that, that the tobacco 16 17 companies actually reported to the government that 18 they agreed to share breakthrough information? I don't think I thought to ask that 19 20 particular question, no. I certainly asked them to 21 show me any document that had to do with an agreement to share information. I guess it never crossed my 22 mind that such a document existed. If I had known, I 23 would certainly wanted to have seen it. 24 25 It would be important to you as an economist 03850 1 if you found out that the tobacco companies actually 2 told the government that they had agreed to do this? 3 Not necessarily, no. 4 Well, let's see what happened here. It says 5 present was secretary Wilbur J. Cohen. Do you 6 remember Mr. Cohen was actually the Secretary of the 7 Office of Health Education and Welfare at that time. 8 Have you heard his name before, sir? 9 I don't know if I have heard his name before. 10 I was fourteen at that time, so I probably was not 11 familiar with who was the secretary of Health, Education and Welfare at that time. I mean, I will 12 13 take your word for it that that's who he was. I 14 probably did not know that. 15 That's what the document says? Q 16 Α 17 And you do agree that the Department of 18 Health, Education and Welfare, that is a federal

```
agency of the federal government?
19
20
      A It was then, yes.
              And it shows that this meeting -- you
21
22
      recognize some of these names over here as being
      people from tobacco companies?
23
24
              Certainly. CEOs and attorneys, yes.
25
               And it says secretary Cohen opened the
03851
1
      meeting by asking Senator Clements to say a few words.
2
      So apparently we have a U.S. senator at the meeting?
3
             Apparently so.
              Let me go to the portion of the document that
 4
      relates to my point here, as far as this breakthrough
 5
      agreement. By the way, if you look at this document,
 6
 7
      this is a document that is dealing with this issue of
8
      forming the Tobacco Working Group, which is this joint
9
      cooperative effort between the federal government and
10
      the tobacco companies, to see if they could develop a
11
      safer cigarette, is that correct?
12
              I don't know. I haven't had a chance to read
13
      the document. So I don't know for certain whether
      that is what this is about.
14
15
              Here. Let me try to help you then. Maybe go
16
      to page 7. This is not my point, but it puts it in
     perspective. It is talking about an agreement has
17
18
      been reached at the National Institutes of Health that
19
      the less hazardous cigarette program will be managed
      and directed by Dr. Paul Kotin, K-o-t-i-n. Do you see
20
21
      that?
22
        Α
              Yes.
23
              Does this appear to be a document that is
24
      dealing with that project? Go ahead and look at the
25
      document if you want to, sir.
03852
1
              There certainly seems to be a less hazardous
2
      cigarette program, yes.
 3
              Let's go over to page 9. Can you go to page
 4
      9 with me, sir?
 5
       Α
             Okay.
 6
              Mr. Harrrington -- is he with the tobacco
 7
      companies, sir?
8
              Yes, I believe so.
        Α
9
              Mr. Harrrington stated that each of the
10
      companies had done extensive research work and that
11
      the industry could cooperate by furnishing, say to Dr.
12
      Kotin, the results of this research which would result
13
      in an economic savings if nothing else.
14
              Do you see that?
15
              I do.
16
               And then we go down a little bit later. Dr.
17
      Endicott -- he is with the government, is that
18
      correct?
19
              Yes, I believe so.
20
              Dr. Endicott said, the NIH -- that's the
21
     National Institutes of Health, is that correct?
22
              Yes.
              -- had worked with the pharmaceutical people
23
24
      for ten years and much of the information submitted by
      that industry had been of a confidential nature and
25
03853
1
      there had been no leaks.
              Do you see that, sir?
 3
              Yes.
         Α
```

Then Mr. Finch speaks, he is with the tobacco 4 5 companies, is that correct? Yes. 6 Α 7 Mr. Finch stated that the companies and the industry had never discussed among themselves -- --8 9 Mr. Finch stated that the companies in the industry had already discussed among themselves the matter of 10 11 handling any method of making a safer cigarette, 12 should it be found that present cigarettes are not 13 safe, and they all had agreed informally to share such 14 information with each other. 15 Mr. Galloway stated that if the companies and the government cannot trust each other then we cannot 16 17 work together. 18 Do you see that, sir? 19 Α Yes. 20 So you were not aware that the tobacco 0 21 companies told the government that they were willing 22 to share this type of breakthrough information? 23 I was not aware that they had told the government that they were undertaking arrangement 24 number 4, which apparently quite clearly they were. 25 03854 1 I'm sorry, what? 2 Arrangement number 4, which apparently quite 3 clearly they were. 4 Let's talk about that. Because you told the jury, I believe, that you didn't actually ever see any 5 6 evidence that the tobacco companies ever shared any 7 breakthrough information? 8 No. It seems quite clear from this document 9 that you just showed me that there is no doubt 10 whatsoever that they did in fact agree to number 4. I 11 have never seen this. And, sir, if -- I asked you questions earlier 12 13 about the Tobacco Working Group. Do you recall that? 14 Yes. A 15 A ten year project. 0 16 I can't recall that, but if you say so, yes. Α 17 And for the tobacco companies to work with 18 the government, together with the government to 19 discover a safer cigarette, by the nature of that work it is going to be shared with everybody, isn't it? 20 21 If in that setting they arrive at any 22 breakthroughs, yes. 2.3 And was the government part of this collusive 24 agreement? 25 No. I think the government was probably 03855 1 interested in discovering if there were a safer 2 product. 3 So the government was colluding -- let me 4 just finish, Doctor. 5 If I understand your testimony then, the 6 government, when it worked with the tobacco companies 7 to share breakthrough information, that it is 8 colluding with the tobacco companies under agreement 9 number 4? No. That's a total -- I think a total 10 11 mischaracterization of my opinion. 12 Q Why? 13 For one thing, the government is not in the 14 business of producing safer products. The government

has an interest, I think, in passing that information 15 16 on. It is the companies that are concerned that sharing information removes the incentive to do the 17 18 sort of research that it takes to provide a safer product, and that it removes that kind of research or 19 20 suppresses that kind of research as a matter of taking competitive advantage. The government is not a 21 22 competitor of the tobacco industry. 23 Doctor, maybe you missed my point. The 24 government asked the tobacco companies jointly to come 25 work with the government and try to develop a safer 03856 1 cigarette. 2 Do you understand that? 3 I will take your word for that. But I don't 4 think that is so. Yes. 5 And therefore -- and the tobacco companies -we talked about this earlier, and I don't want to go 6 7 back through it again. You became generally aware the tobacco companies for a number of years had meetings 8 9 and worked with the government trying to develop safer cigarettes, is that correct? 10 11 Yes. 12 By the nature of that project, whatever they 13 discovered would be shared with each other, wouldn't 14 Anything they revealed during that project 15 would, yes. But there is also the opportunity to do 16 work on your own in the interests of gaining a 17 18 competitive advantage and trying to make -- I mean, 19 pharmaceutical companies do lots and lots of work 20 trying to find cures for diseases. They also work 21 with the government. But they spend vast sums of money trying to find drugs to cure diseases. And they 22 don't, generally speaking, share the results of that 23 information with their competitors. The profit motive 24 25 is to be able to get there first and win the 03857 1 competitive battle. 2 And that's exactly what the tobacco companies 3 did, didn't they? 4 No, I disagree entirely. Doctor, they worked with the government for a 5 6 period of years, is that correct? 7 Apparently, yes. 8 But also at the same time they were working 9 to develop their own safer cigarettes and they never 10 shared one breakthrough, did they? 11 I'm not aware they did. But they had an 12 agreement not to. Q Let's find out. I thought that's what you 13 14 told us on direct examination. Let's get our list of 15 safer products here. Here we go. 16 Did you find any evidence that BATCo or B&W 17 shared any breakthrough information regarding Ariel 18 with the other companies? 19 Α 20 In fact, they patented the Ariel process, did 21 they not? 22 They had some patents on the Ariel, yes. Α 23 Q In fact, that is a B&W product, is it not? 24 I believe so. A 25 Q Did you see any evidence that B&W shared any

```
03858
     information regarding Fact?
1
 2
        A Not to my knowledge.
 3
             They actually patented the process for Fact,
     did they not?
 4
5
              I believe so, yes.
        Α
             The Imperial cigarette, did you see any
 6
 7
      evidence that that was shared with any other company?
8
       A I think the Imperial cigarette never got far
9
     enough -- I think Imperial was told to stop doing
     research before any research was done.
10
11
             Was there any sharing of breakthrough
      information regarding Imperial?
12
13
       A I don't think there was any information,
14
     because I think Imperial was told to stop it by BATCo,
15
     and therefore there was nothing to share because there
16
     was no result.
17
              So nothing was shared?
18
             There was no result. No information to
19
     share, so nothing was shared.
20
     Q Let's look at the next product we talked
21
     about this morning, the palladium, XA?
22
       Α
             Yes.
2.3
              Liggett & Myers product?
        Q
24
        A
              Yes.
25
              They didn't share any of that with the world,
03859
     did they?
1
 2
        A
              No, clearly Liggett & Myers did not.
 3
        Q
              In fact, they patented the process, did they
4
     not?
5
              Yes.
       Α
 6
              To protect it?
       Q
7
       A
              That's correct.
8
       Q
              Saratoga was a Philip Morris cigarette?
       Α
9
              Yes, I believe so.
10
              Philip Morris -- strike the question.
        Q
11
              You didn't see any evidence that Philip
12
    Morris ever shared any of the Saratoga technology with
13
     any other company, did you?
14
      A
             No.
15
              They patented the Saratoga, did they not?
       Α
             I don't know if they did or didn't. I'm not
16
17
    certain.
18
       0
              You saw no evidence that they shared the
19
    technology, did you?
20
             No.
21
              Premier, did you see any evidence that
22
    Reynolds shared any breakthrough technology regarding
23
     Premier?
24
        Α
25
              They patented Premier, did they not, with a
03860
1
     number patent?
2
              I believe so, yes.
 3
              I could add more on here. The Philip Morris
 4
     Accord cigarette. You said you generally are aware of
 5
     the Accord?
             I am somewhat aware of what Accord is.
 6
 7
              It has been marked in evidence -- have you
 8
     seen this product before?
 9
              I haven't seen one physically, no. I have
10
     heard descriptions of them. I have not seen one
```

11 physically. 12 Q I am not going to spend a lot of time on it. 13 Other witnesses have talked about the product. It is 14 basically -- strike the question. It is a heating device, I understand. 15 16 It is heating --Α 17 Variation of the heating as opposed to 18 burning. 19 Do you know anything about the technology 20 that went into designing this product? A Not particularly, no, not the details of it. 21 Did you see any evidence that Philip Morris 22 ever shared any of the technology to develop this 23 product with any other tobacco company? 24 25 No. 03861 1 In fact, they patented, did they not? Q 2 I believe so. 3 The other cigarette Philip Morris developed 4 was the Next product, do you remember hearing about 5 that? 6 Α I have heard of Next. 7 Did you see any evidence that Philip Morris 8 ever shared any breakthrough information about Next 9 with any other competitor? 10 No. 11 They patented the process, did they not? Q 12 They did, yes. Α 13 Thank you. I have one last area I want to 14 cover with you. I want to clean one area up. And 15 then I am going into my last area of questions for 16 you, Doctor. 17 Α 18 You told us last week in response to one of my questions that Liggett and Meyer joined this 19 collusive agreement number 1. Are you with me? I 20 21 want to make sure -- are you talking about the first 22 agreement now? 23 I understand that you are talking about the 24 first agreement. 25 I think you told me last week that you 03862 believed Liggett & Myers had joined that collusive 1 2 agreement at least by January '64? 3 A I'm not sure -- no, I think that is a 4 misstatement. 5 Let me just try to refresh your memory, 6 Doctor. We had a break, and you came back after a break and told me that you had found the Tobacco 7 8 Institute document dated in January of 1964. Do you 9 recall that now? 10 Yes. Okay. I'm sorry. Thank you. 11 I am not trying to confuse. Do you remember 12 what I am talking about? 13 Yes. A 14 All I am trying to pin down, you told us last week at least by January of 1964 that document you 15 16 said told you that Liggett was part of this collusive 17 agreement, is that correct? 18 That's right. It seemed to me at that 19 point that Liggett was taking part in a meeting at 20 which the firm -- the companies agreed that they would 21 not compete on the basis of health claims.

```
22
              I think you also told us, though, you could
23
      not pinpoint exactly when they joined prior to 1964,
24
      is that correct?
25
             I think that's right, yes.
03863
1
              And am I correct that it is your opinion that
      Liggett & Myers had -- was only part of this agreement
2
3
      for about three or four years, and then they withdrew,
4
      is that correct?
5
              Of the whole conspiracy, of the whole cartel?
 6
              I am asking you.
7
              I am trying to clarify the question.
8
              I am asking you -- here is my question.
      During the entire period of cartel, whatever it ran,
9
      however long it lasted, for its entire lifespan, is it
10
11
      your testimony that Liggett & Myers was only joined as
      part of it for three or four years and then withdrew?
12
              No. I think that is the CTR, that they were
13
14
     part of the CTR, is my recollection, and the cigarette
15
      advertising code and things like that. I think in
      1978 when they refrained from offering the XA product,
16
17
      I think they were refraining from competing on the
18
      basis of health.
19
              Maybe I am confused. I need to check one
20
      point for a minute here.
21
              THE COURT: Why don't we go ahead and take
22
      the break.
23
               (At this time a short break was taken.)
               THE COURT: Please sit down.
24
25
     BY MR. WEBB:
03864
              Doctor, I think I can try to get through this
1
2
      reasonably quickly. I want to make sure I know what
      your testimony is on Liggett & Myers. Let's take one
3
      agreement at a time.
4
5
              Let's start with number 1. This is the
 6
      agreement not to advertise on the basis of health. Do
7
      you see that?
            Yes.
8
       A
9
              I believe that is the agreement you told me
10
      at least by January of 1964 Liggett & Myers had joined
11
      this collusive arrangement, is that correct?
       A Yes, I believe, at least to some extent they
12
13
      had joined into that by '64.
       Q To some extent. Are they in the agreement at
14
15
      that point?
16
              They seem to be taking a common -- joining
17
      the common approach to not making statements outside
18
      of the industry as a whole, and the one comment that I
19
      read was that on the basis of advertising, if anyone
20
      went their own way there would be vulnerability. So,
21
      yeah.
              Am I right, can you tell me when before 1964
22
23
      they actually agreed to become part of this
24
      arrangement?
25
               I cannot tell you -- date it precisely.
03865
1
              Not precisely, at all. Can you date it at
 2
      all?
 3
              No, I can't. The earliest -- the earliest
 4
      document I have seen that I can think of -- there are
 5
      lots of documents. The earliest one I can think of is
 6
      that one I found for you.
```

7 Q That is January 1964? 8 Α Yes. 9 How long after January 1964 did Liggett & 10 Myers remain part of a collusive agreement number 1, that is the arrangement not to advertise on the basis 11 12 of health? Well, I think they were getting ready to 13 14 break out of that, to cheat on that agreement in 1978, 15 but in the end did not introduce the XA product as a 16 result of pressure brought by other members of the 17 conspiracy. And so at least in 1978, I think they were still holding to that. 18 Had they been -- has Liggett & Myers been 19 20 continuously part of this collusive arrangement of 21 number 1, that is the arrangement not to advertise on 22 the basis of health, continuously from 1964 up to the 23 current date? It is kind of hard to say exactly where they 2.4 25 are in and where they are out. I think in 1964 they 03866 are pretty clearly in, because in 1964 there is a 1 2 document that indicates that they are agreeing with the other major companies not to advertise on the 3 4 basis of health. I guess I think in 1978, 1979 when 5 they agree not to produce the XA under pressure from 6 the other firms in the industry, that they are 7 agreeing not to advertise the health basis -- in fact, 8 they are agreeing not to produce XA at all at that 9 point in time. 10 After that it is kind of hard to say. 11 haven't seen any evidence that Liggett & Myers is 12 actively advertising on the basis of health at the 13 moment either. So your testimony is you don't know when they 14 15 are in or when they are out? It is hard to see precisely -- I have given 16 17 you points in time when I think they are in. I 18 haven't seen anything to suggest they are out at the 19 moment. 20 So they are still in today? Q 21 As far as I know. 22 Let's go to agreement number 2. This is the 23 arrangement to mislead the public about smoking and 24 health. When did they join this agreement? 25 Again, my understanding is they came into the 03867 CTR sometime in the early '60s. I think, again, just 1 about the same time that they were part of that 3 arrangement that we spoke about just a second ago, the 4 agreement not to advertise. 5 So they were taking part in the Tobacco 6 Institute, CTR agreement to present a common front 7 about the industry's position on smoking and health at 8 that point in time. 9 How long did they stay in, Doctor, just so --10 on agreement number 2, so I understand, they came in the early '60s, and how long did Liggett remain as 11 12 part of this collusive agreement? 13 I know that Liggett has since -- just in the 14 last few years basically said -- made the admission 15 that they believe that there is a link between smoking and cancer. So I think that Liggett seems to have 16

broken ranks just in the last few years. So I think

17

- by now Liggett seems to admit that there is a link 18 19 between smoking and cancer. 20 Q So they were in continuously from the early 21 1960s until when, approximately? I think it is -- I can't recall exactly when 22 23 it was that Liggett agreed, but I think it is just in the last couple of years. Since the testimony of the 24 25 CEOs to Congress where the CEOs maintained there was 03868 1 no evidence, they did not believe that there was a 2 link between smoking and cancer, and did not believe that -- I am just trying to date it as best I can. I 3 think it was in 1994. I think it was subsequent to 4 5 that that Liggett said we admit there was a link. 6 So they were part of it from the early 1960s 7 to 1994? 8 A Yes. 9 You told the jury just last week they were 10 only in this one for three or four years, didn't you? 11 No, I think that was being a part of the CTR. That's what this one is, this is the CTR 12 agreement? 13 It goes beyond simply being a member of CTR. 14 Α 15 I'm sorry. When Mr. Ferguson pointed to this 16 number 2, you told him what this agreement was about, 17 was about using CTR as a front for the tobacco 18 industry and to use CTR not to get to the truth of smoking and health, didn't you? 19 That is a piece of it, yes. 20 21 What's the -- never mind. Strike the 22 question. 23 Number 3, how long is Liggett & Myers in 24 agreement number 3 not to refrain from in-house testing of live animals, or were they ever in that 25 03869 1 agreement? 2 I have not seen a reference to Liggett & Myers specifically. I know that Liggett & Myers 3 pretty much early on decided to take Dr. Wynder's 4 5 research seriously, although they didn't do it in-house, they did it at the Arthur D. Little 6 7 laboratories. But they -- pretty much from the beginning they took the question of Dr. Wynder's 8 9 results seriously. 10 Were they in this agreement, sir, number 3? 11 I have not seen a document that says 12 specifically they were. The documents they said --13 refer to industry arrangements, in -- gentlemen's agreements in the industry. I think that Liggett & 14 Myers -- I think that -- my reading of the document is 15 16 that Liggett & Myers was doing out-of-house testing on 17 live animals in the -- for quite some time, and that 18 the industry was aware of that. 19 Just tell me, were they part of this 20 agreement, number 3? 21 I think -- I guess -- the documents -- I 22 think the documents suggest that the industry is. 23 have not seen anything that says that the industry, 24 except for Liggett & Myers, is in this agreement. On 25 the other hand, I think it was clear to the people in 03870 1 the industry that Liggett & Myers was not following 2 the agreement.
- http://legacy.library.ucsf.@du/tid/drttq@7/a00/pdfidustrydocuments.ucsf.edu/docs/xkgl0001

```
3
         Q
               Is your answer yes or no?
 4
         Α
               Yes.
 5
               They are in?
 6
               I think -- I haven't seen anything to say
 7
      they were out. So, yes, I think they were in.
8
              Agreement number 4, Liggett & Myers joined
9
      that agreement, the agreement not to share
10
      breakthroughs?
11
               Again, I have not seen anything that says
12
      that -- the statements I have seen about those
13
      arrangements did not specify that they were
      arrangements that exclude Liggett & Myers, so I have
14
      to think when people talk about the industry they are
15
      talking about everyone.
16
17
              Let me go to my last area of questioning,
18
      Doctor, which deals with, as I understand, kind of the
19
      bottom line of your testimony.
2.0
               You told the jury at the end of Mr.
21
      Ferguson's questions, that it is your conclusion that
22
      the State of Washington suffered an economic injury as
23
      a result of these collusive agreements, is that
24
      correct?
25
               Yes, I believe that the State of Washington
03871
1
      was injured.
               I'm sorry, what?
 3
               Yes, I believe the State of Washington was
 4
      injured.
               Suffered an economic injury?
 5
               Economically, yes.
 6
         Α
 7
               If I understand what you were explaining to
      the jury, it is your testimony that it is -- because
 8
9
      if these collusive agreements had not taken place the
      State would have had to pay out less money in
10
      smoking-related health care costs, is that correct?
11
12
               That's my understanding, yes.
13
               Is that your testimony?
         Q
14
        Α
               That is my belief, yes.
15
               And if I understand your testimony, you
16
      actually have to go through five levels of assumptions
17
      before you get to that conclusion, is that correct?
18
               I'm not sure I mentioned five levels --
               Let me go through and see if I have it right.
19
20
      Tell me where I'm wrong. If I understood your
21
      testimony, your economic logic goes like this.
2.2
               Number one, if these alleged collusive
23
      agreements had not taken place you believe a safer
24
      cigarette product would have been introduced into the
25
      marketplace sooner, is that correct?
03872
1
               I think in all likelihood that is true, yes.
 2
               Number two, you also believe if there had not
 3
      been these collusive agreements there would have been
 4
      more information regarding smoking and health
 5
      available in the market, is that correct?
 6
              More -- I'm not sure I would characterize it
 7
      that way. I think I would say that more truthful
 8
      information would have been available in the
 9
      marketplace. Again, I would be awfully careful about
10
      using the term marketplace with regards to
11
      information. I think that people would have known the
12
      truth about smoking and the public health community
13
      would have known the truth about smoking and health,
```

14 and with more certainly. 15 Q So truthful and more certain information 16 sooner? 17 Α Yes, early. 18 0 Earlier, is that what you are saying? 19 Α 20 Number 3, then you contend if the safer 21 product had been available earlier and there had been more certain and truthful information available 22 23 earlier, then Washington Medicaid recipients who 24 smoked would have made different smoking related 25 decisions, is that correct? 03873 Yes, I think that is reasonable. 1 2 And then you go to the fourth level, and that 3 is if the Washington Medicaid recipient smokers had made different smoking decisions they would have had 4 5 less smoking-related illness, is that correct? 6 And then you get to your last step, which is 7 then the State would have paid less in health care 8 9 costs? 10 Α Yes. 11 I would like to go through those five steps, 12 because I want to make sure I understand what you 13 actually -- where we have to go to get down to the 14 State having an economic injury. We start here with number 1 -- well, as I understand it, this -- we will 15 call this the State injury if certain things happened. 16 Are you with me? 17 18 Α Yes. 19 First we need to have safer products, these Q 20 are cigarette products, earlier, is that correct? That's one component of it, yes. 21 I want to make sure I understand. Let's take 2.2 23 each at a time and ask you a few questions, okay. 24 A Okay. 25 Are you with me? Q 03874 1 Α I quess so. 2 In what year would this safer product have 3 been introduced into the marketplace, if there had not 4 been these collusive agreements? 5 I am not sure I can say for certain in what 6 year things would have been introduced sooner. 7 Are you just going to guess, then? 8 Strike the question, your Honor. I strike 9 the question. 10 If you don't know what year, would it have 11 taken place before the Medicaid program started in 12 this state? 13 It might have, it might not have. Α 14 If we don't -- by the way, this safer 15 cigarette, if it had only been in the market for say 16 two years versus twenty years, would that effect the 17 economic injury? 18 It would presumably affect the magnitude of 19 the injury, but it wouldn't necessarily affect the 20 existence of the injury. 21 This so-called safer cigarette, would it have resulted in, for example, no lung cancer? Strike the 22 23 question. 24 What smoking-related diseases would be

reduced or eliminated by your safer product? 25 03875 1 It depends on the safer product that would 2 have been produced. Conceivably any and all of the diseases that are related to smoking. 3 4 Instead of saying conceivably -- as far as 5 your opinion that there was an economic injury, when 6 you reached that opinion, what did you assume, that 7 lung cancer would be eradicated? 8 Α No. Did you assume lung cancer would be reduced? 9 10 It is my belief that lung cancer would have been reduced if there had been safer products, or if 11 people had known more -- the truth about smoking and 12 13 health and hadn't been mislead by the industry. 14 I will get to information. Let's just stick 15 to safer products for a moment, okay? What is there about the safer cigarette that would have reduced lung 16 17 18 Α Well, for example, the XA did not create --19 did not cause the tumors in mice, and my understanding 20 is that the health community considers that indicative of the link between the safety of the product and 21 22 human beings. 23 Anything else? 24 Just generally that there are -- for example, 25 there are products that remove the bad guys, as Ross 03876 Johnson refers to them, the cancer causing compounds, 1 2 reduces the number of the cancer causing compounds, 3 and that those things would be safer, too. Exactly what would have happened is difficult to say because 4 5 the cartel interfered with that. But in all likelihood it could have been the XA, it could have 6 7 been something like Premier, but ten years earlier. It could have been a number of possibilities. 8 It could have been, but which one was it? 9 We don't know for certain because the cartel 10 Α 11 delayed it, and so we will never know quite how the 12 world would have been like absent the cartel. 13 Then how do you know the State suffered an 14 economic injury if you don't know what the safer 15 product would be? 16 I am saying its more likely than not they 17 would have. This is a standard problem with cartels, that once they interfere with the market we never get 18 19 to see what would have happened in the absence of 20 them. 21 Are you guessing there would have been an 0 22 injury? 23 No, I'm not guessing. 24 MR. FERGUSON: Objection. Argumentative. 25 THE COURT: Sustained. 03877 1 BY MR. WEBB: 2 Are you assuming lung cancer would be reduced 3 or there would be no lung cancer at all in Medicaid 4 recipient smokers? 5 Α I don't believe there would be no more lung 6 cancer at all. 7 What percent did you assume would be reduced? 8 I have not made a calculation on how big the 9 affect would be.

```
10
        Q
              At all?
11
        Α
              No, not at all.
12
        Q
              Did you attempt to?
13
        Α
14
        0
              Did you attempt to estimate how much
15
     reduction there would be in, for example, emphysema?
16
        A
             No.
17
              How about cancer of the larynx?
        Q
        Α
18
              No.
19
       Q
             Cancer of the esophagus?
20
       Α
             No.
              Cancer of the pancreas?
21
       Q
              No.
22
        Α
              No idea what that percent would be?
23
         Q
24
        Α
              I have not tried to estimate the magnitude of
25
      the reduction.
03878
1
               Would the safer product have nicotine in it?
               I believe that in all likelihood the safer
     product would have had nicotine in it because the
 3
      indication, from what I have read in the documents, is
 4
 5
      that consumers smoke cigarettes in order to get a dose
      of nicotine, and without that dose of nicotine it
 6
7
     doesn't satisfy the demand that they have. That's
8
     what they are addicted to. And so those products tend
9
     not to work very well.
              So I imagine it would have had nicotine in
10
      it. For example, the XA, as I understand it, had
11
      nicotine in it. The Premier has nicotine in it,
12
13
      Saratoga has nicotine in it, and so forth.
14
            I take it you agree Dr. Burns and Dr.
15
    Henningfield are better experts than you are on safer
16
      cigarettes?
17
              MR. FERGUSON: I'm sorry. I didn't hear you.
18
      Is it safe or safer?
19
              MR. WEBB: Safer.
               THE WITNESS: Yes, I think Dr. Burns and Dr.
20
21
     Henningfield are in a better position to evaluate the
22
     technological aspects of cigarettes and their
23
      implications on health.
24
     BY MR. WEBB:
25
              Did you hear their testimony on their opinion
03879
1
     as to whether a cigarette would be safer if it still
 2
     had nicotine in it?
 3
              I can't say that I was here -- I certainly
     wasn't here for Dr. Burns. I can't say that I was
 4
5
     here for Dr. Henningfield's testimony on that.
 6
              How much tar would be in this hypothetical
 7
      safe cigarette you are talking about, or assuming?
 8
            I don't know for certain.
       A
9
              Would it have more than three milligrams of
        Ο
10
     tar?
11
              I do not know for certain.
12
             Would that hypothetical cigarette work if it
13
     had removed all benzoapyrene?
14
             Perhaps not all. I don't know for certain.
        A
15
              Would it have removed all nitrosamines?
        Q
16
        Α
              Again, the same answer.
17
              Would it have removed all carbon monoxide?
       Q
              I don't know if it would have removed all or
18
       Α
19
      not, no.
20
              Would it have removed some of them?
        Q
```

```
It could have.
21
         Α
22
               Or would it?
         Q
23
         Α
               It could have.
2.4
               How about oxides of nitrates? Would it have
      removed oxides of nitrates?
25
03880
               It could.
1
 2
              How much would it cost -- how much would this
 3
      hypothetical safe cigarette cost in the marketplace?
 4
      Have you done an analysis of that?
 5
             No.
              Have you done any economic analysis to figure
 6
 7
      out how many people would buy the safer product?
 8
              No.
 9
               Let me go to the second assumption. I am
10
      going to simplify this. But you say more truthful and
      certain information -- more information to shorthand,
11
12
      more certain and truthful information?
13
             Yeah, or less untruthful information, and I
14
      think consumers would have had more certainty about
15
      the nature of the relationship.
             So under this assumption -- I put S and H for
16
17
      smoking and health -- more certain and truthful
18
      smoking and health information earlier?
19
              Yes.
20
              Is that correct?
        Q
21
        Α
              Yes.
22
              Now, let me just ask you a few questions
      about that. We have talked about CTR, and I am not
23
24
      going to go back through all that right now, but have
25
      you done any studies of the Washington Medicaid
03881
1
     population in order to determine what smoking and
 2
     health information they were aware of at any given
     point in time?
 3
 4
         Α
 5
               Have you seen any evidence in connection with
      preparing for your testimony that would indicate to
 6
 7
     you that the members of the Washington State Medicaid
 8
     population who smoked were any less knowledgeable
9
      about smoking and health issues than the general
10
      population?
             No, not necessarily.
11
        Α
12
              Now, you are aware that -- you are aware the
13
      State's Medicaid program began in 1969, is that
14
      correct?
15
              That seems about right to me, yes.
16
              You are aware that the surgeon general
17
      released the 1964 surgeon general report that
      concluded that cigarette smoking causes lung cancer
18
19
      five years earlier, in 1964, is that correct?
20
              That makes sense, yes.
         Α
21
               Did -- do you have any reason to believe that
22
      the people who make up the Washington Medicaid
23
      population who smoke were unaware of the conclusions
24
      reached by the surgeon general?
25
              No, not any more than anyone else. No.
03882
               You are aware in 1966, three years before the
 1
 2
      State's Medicaid program began, Congress made it
 3
      mandatory that cigarette packages have a warning label
 4
      on them, is that correct?
 5
              I thought it was 1972. We talked about it
```

6 last week. 7 Q Sorry. It was 1966. The first warning label went on in 1966, which required a warning that stated 8 9 cigarettes may be hazardous to your health. I thought you told me last week it was 1972. 10 11 I will take your word for it. 12 They changed the warnings in 1972. 13 I'm sorry. Α 14 Q I'm not trying to mislead you. 15 A I am aware there were warning labels, yes. Before the State Medicaid program began, is 16 17 that correct? I will take your word for it that it was 18 19 1966. You have now managed to confuse me a little bit from what we talked about last week. I will take your 20 21 word for it, yes. 22 Have you seen any evidence that the people --23 the members of the Medicaid population in Washington who smoked -- have you seen any evidence that they did 25 not understand or were not aware of the warning label 03883 1 on cigarettes? 2 A No. 3 If I understand, the third assumption we are 4 making is that Medicaid smokers, you believe, would 5 have made different smoking choices if one and two 6 were in place? 7 I said if either one or two had been in 8 place. 9 So what you are telling the jury is if there 10 had been safer products earlier, more truthful and 11 certain information about smoking and health earlier, 12 then Washington Medicaid smokers would have made certain different smoking choices? That's in your 13 chain of logic, is that correct? 14 15 I think that is likely. 16 Let me ask you a few questions about that. What percent or number of the Medicaid recipient 17 smokers in the State would have switched to the safer 18 19 product? 20 I don't know for certain. A 21 You don't have any percentage at all, or a 22 number? No. Again, we will never know for certain 23 24 how the world would have been, had the industry not 25 been involved in this conspiracy, because they were. 03884 1 Then how do we know the State suffered an economic injury if we don't know for sure? 2 3 A Because we do see that when information is 4 provided to consumers they respond to it. 5 Okay. Well, that's what I am trying to find 6 out about. 7 Have you studied the smoking habits of the 8 Washington Medicaid population? 9 No, not specifically. 10 Let's start with, have you gone out to 11 interview any of the folks that are part of the Washington State Medicaid population to find out if 12 13 they actually would have switched to a safer 14 cigarette? 15 Α 16 MR. FERGUSON: Your Honor, I object on

17 foundation grounds. The defendants know Dr. Harris 18 reviewed this material for the State, not Dr. Solow. 19 THE COURT: Overruled. 20 THE WITNESS: No, I have not interviewed 21 Washington Medicaid smokers, no. 22 BY MR. WEBB: 23 If you haven't interviewed any, have you at 24 least studied any surveys or samplings of the 25 Washington Medicaid population to see if they would 03885 have switched to a safer product? 1 2 Α No. You have not done that? 3 Q 4 Α 5 Q Have you studied any other Medicaid 6 population outside this state to reach that 7 conclusion? 8 Α No. 9 Now, as far as these different smoking 10 choices, are you making the assumption -- let's move 11 on to this next one. 12 Are you making the assumption if there had 13 been more information available sooner, that some 14 Washington Medicaid smokers would never have started smoking in the first place? 15 16 I think that is entirely likely. 17 When you say it is likely, my question is, have you gone out and done any study to see whether 18 that is true or not? 19 20 No. Not personally, no. 21 Have you done it impersonally? As I said, I am relying on Dr. Harris's 22 23 report. But it certainly seems entirely reasonable to me -- people do seem to respond to the information, 24 both in terms of quitting, in terms of initiating and 25 03886 1 in terms of how much smoking they do. I mean -- this testimony that you gave that 2 the State suffered an actual real economic injury, did 3 4 you do any analysis why Medicaid smokers in this state 5 start to smoke in the first place? No, I did not. 6 7 Did you do any study as to why they quit, why 8 Medicaid smokers quit? 9 Α No, I did not. 10 So you are assuming that, correct, there 11 would be different smoking choices? 12 I am relying on Dr. Harris's report, which I have read, and which seems to me makes an awful lot of 13 14 sense. 15 Dr. Harris is going to testify and we will 16 cross-examine him. But independent of Dr. Harris's 17 report, have you made any study to see whether 18 Washington Medicaid smokers would have made different 19 choices? 20 No, I have not studied that differently. I am relying largely on Dr. Harris's opinion. Although, 21 as I said before, it does seem to be the case if you 22 23 look at smoking and information, that people respond 24 to information. There -- there are other economists 25 who have reached that opinion as well. 03887 1 Just so I know, so we can tell the jury, what

```
2
     percent or number would never have started smoking in
 3
     the first place?
             I do not know.
 4
        Α
 5
              Do you have any idea?
              No, I can't tell you for certain.
 6
7
              What number or percentage of the smokers
     would guit if there was more information available?
8
       A I do not know for certain.
9
              You have no idea?
10
       Q
11
       Α
             I do not know for certain.
12
       Q
            Do you have any idea?
13
              MR. FERGUSON: Objection. Repetitive.
              THE COURT: Overruled.
14
15
              THE WITNESS: I do not have an estimate.
16
    BY MR. WEBB:
17
             So whether it is one percent or ninety
18
     percent, you don't know?
19
       A No.
20
             If I understand your fourth assumption, it's
21
    that if one, two and three happened to turn out to be
22 correct, then Medicaid smokers would have less health
23
     care costs, is that correct?
            Related to smoking, yes.
24
25
             I will articulate. Less health care costs
03888
    because they would have less smoking related disease?
2
             Let me is ask -- again, that is assuming
3
4
     there were the safer products earlier or more
 5
     information available earlier, then people would have
 6
     made different smoking choices?
7
             Yeah.
8
             And then we get down to level 4, that they
9
    would have less smoking related disease, is that
10
    correct?
11
              Yes.
12
             For example, did you make the assumption that
     people would have less heart disease?
13
14
     A I think that's a reasonable conclusion to
15 reach potentially, yes. Yes, there seems to be a link
16 between smoking and heart disease, so less smoking or
17
    smoking of safer products would presumably lead to
     less heart disease.
18
19
      Q When you say presumably, you do understand --
20
    am I correct you understand heart disease can be
21
     caused by factors that have nothing to do with
22
     smoking?
23
            Certainly.
      A
24
             You understand that scientific and public
     health believe that diet may affect heart disease?
25
03889
1
            Certainly.
        A
2
        Q
             Lack of exercise may affect heart disease?
 3
       A
 4
        Q
             Heredity may affect heart disease?
 5
       Α
 6
              Whether you are a male or female may affect
        Q
 7
    heart disease?
 8
        Α
             Yes.
9
              Did you do any study or analysis so you could
10 determine whether or not the lesser amount of heart
11
    disease would be attributable to smoking or some of
12
    these other factors?
```

```
13
              I think you have to hold all else constant.
14
      I understand one of the factors that lead to heart
15
      disease is whether people smoke or not. To the extent
16
      they are doing less smoking, that would lead to less
     heart disease. I didn't say it would eliminate heart
17
18
      disease. There would be less heart disease.
19
              Have you done any type of calculation to take
20
      all those factors into consideration and calculate how
21
      much less heart disease there would be?
22
              No.
              How do you know it is not zero?
23
24
             Because there appears to be statistically a
25
      link between smoking and heart disease. And so it
03890
1
     seems reasonable to conclude that it wouldn't be zero,
2
      that there would be some effect if people smoked
      less or smoked safer products.
3
             But you don't how much?
4
5
              I don't. I don't think it would eliminate
     heart disease. As you say, people get heart disease
6
7
      for other reasons. But that it would reduce heart
      disease, that seems to be a reasonable conclusion.
8
9
              You didn't do that analysis?
10
        Α
              I am relying largely on Dr. Harris, but also
11
      on simply being aware of the fact that smoking and
12
     heart disease statistically has been established.
13
             Have you done any study or calculation to
14
     reach that conclusion?
      A No, I am relying on things I have read. It
15
16
      is not my own work, no.
17
       Q Let's go to the last level here, I guess, go
      down to number five. If I understand if, the first
18
19
      four, if the first four turn out to be true, then the
      State will have less health care costs, is that
20
21
      correct?
22
        Α
              Yes.
23
              Pardon my writing.
24
              The State will have less health care costs if
25
     we go through, that there were safer products, more
03891
     information, different choices, smokers have less
1
      disease, and then the State has less health care
2
      costs, is that correct?
3
4
              Yes.
5
              Now, when you get down to the fifth level,
 6
     have you done any study or analysis of the health care
7
      cost structure of the State of Washington Medicaid
8
     program?
9
             I'm not sure what you mean by the health care
10
    cost structure of the State of Washington Medicaid
11
      program.
12
      Q I meant, have you done any study or analysis
13
      of the actual structure of the health care costs
14
      incurred by the State?
15
        Α
16
              For example, do you know how much fraud,
      waste and abuse there is in the Medicaid program that
17
18
      has nothing to do with smoking?
19
      A
             No.
20
              Do you know what the eligibility requirements
    are to be a member of the Washington State Medicaid
21
22
      population?
23
       A No. Not narrowly, no.
```

```
24
              Have you done any study or analysis of what
25
      special health care costs may be experienced by the
03892
1
      Washington State Medicaid population because of those
2
      eligibility requirements?
3
              No.
              Have you done any calculations to compute the
 4
 5
      amount of money that you contend would have been saved
     by the State if these other four conditions had been
 6
 7
      met?
8
       A
              No.
9
             No calculation whatsoever?
        Q
             No. I am relying largely on Dr. Harris to
10
      calculate the magnitude of the damages. He will
11
      testify to his own analysis. I have read it. It
12
13
      seems reasonable to me. It seems like he knows what
     he is talking about. But I am relying on his report.
14
15
      You can talk to him about the measurement --
      Q We will talk to him. But you are the one on
17
      the stand now, you understand.
             I understand.
18
              All I am asking, when you reached this
19
20
      conclusion and told the jury there was an economic
21
      injury, did you do any calculation?
22
               I didn't myself. No, I didn't.
23
               MR. WEBB: That ends my questioning.
24
               As a housekeeping matter, I marked an earlier
      demonstrative exhibit over there in the corner, the
25
03893
1
     structure of CTR, which has been marked as
2
      Demonstrative Exhibit 5000. I would like to offer
      that for demonstrative purposes only.
3
4
              MR. FERGUSON: No objection.
 5
               THE COURT: Admitted.
                                (Exhibit 5000 was
 6
7
                               received in evidence.)
               MR. WEBB: Your Honor, I would like to mark
8
9
     my state injury chart as Demonstrative Exhibit 5001
      and offer it into evidence.
10
11
               MR. FERGUSON: Can we get it translated?
12
               No objection.
13
               MR. WEBB: Can't you read that? My writing.
14
      I apologize.
               THE COURT: Admitted.
15
16
                               (Exhibit 5001 was
17
                               received in evidence.)
               MR. WEBB: Your Honor, I have no more
18
19
      questions of the witness.
20
               MR. McCORMICK: Am I still on the mike here?
21
               May I proceed, your Honor?
22
               THE COURT: Yes.
23
                       CROSS-EXAMINATION
24
     BY MR. McCORMICK:
25
            For the record, Steve McCormick for American
03894
     Tobacco, British American Tobacco Company and Brown &
1
 2
     Williamson.
              Dr. Solow, since the British American Tobacco
 3
     Company is one of the companies that I stand up for in
 4
 5
     this case, I would like to use the time I have to ask
 6
     you questions -- to ask you some questions about some
 7
      British American Tobacco Company documents.
 8
               Would that be all right?
```

9 Α Okav. 10 And specifically, Doctor, the documents I 11 want to ask you about are the ones that you showed to 12 the jury -- or counsel to the State showed to the jury during your testimony last week relating to the 13 14 pricing of cigarettes in certain Latin American countries, including Costa Rica, Venezuela, Argentina, 15 16 and two or three others. 17 Do you recall that testimony generally, sir? 18 Panama and Guatemala I think were the other 19 two, yes. Those are documents that were shown to the 20 jury by counsel during your testimony. And that you 2.1 testified, sir, were evidence to you of price fixing 22 23 on the sale of cigarettes in those countries, correct? 24 Α Yes. 25 Now, I want to ask you some questions about Q 03895 1 the documents and about what was going on down in 2. those countries, Professor. But before I do, that lets me ask you this. You have read, I believe, the 3 4 complaint in this case, true? 5 Α Yes. 6 Q And you understand, although you are not a 7 lawyer, that the complaint is the formal document 8 which is filed by the plaintiff in this case the State 9 of Washington, to get a lawsuit started, right? Yes. 10 Α It is the document in which the State when it 11 12 wishes through the due process of law to bring a 13 defendant to the courtroom to stand up and answer 14 allegations, sets out the charges, the complaints made 15 against the defendants in the case? 16 MR. FERGUSON: Objection, your Honor. believe counsel is instructing the jury on the law. 17 THE COURT: Overruled. 18 19 BY MR. McCORMICK: 20 Do you have my question in mind? Q 21 It was a very long statement. No, I'm not Α 22 sure. I think I was going to agree with it, but now I 23 can't remember the exact statement. If could you 24 repeat it again, please. 25 You understood because you read it that what 03896 1 it constitutes is the charges made by the State of 2 Washington against the defendants in this case? 3 That's my nonattorney's understanding of what 4 it does, yes. 5 And you understand --6 Among other things. I guess it lays out who 7 the various parties are and maybe asks for what the 8 plaintiff thinks the penalties should be and things 9 like that. What you said is part of it, as I 10 understand it, yes. 11 And you understand from reading the complaint 12 that there is no charge, there has been no charge brought by the State of Washington against the 13 14 defendants in this case that there was any price 15 fixing in the United States or in the State of 16 Washington? 17 Do you understand that? 18 I understand that. I believe I understand 19 that, yes.

20 And do you also understand from having spoken 21 to the plaintiff's counsel in this case and worked with the plaintiff's counsel -- did they tell you, as 22 23 they told the members of this jury in opening statements, that the State's evidence in this case, 24 25 its evidence that they would be presenting to the jury 03897 1 in this case, would be that the conspiracy they were 2 alleging would be limited to essentially one area, and that is the area of health claims and health issues, 3 and that otherwise the defendants in this case were in 4 5 competition with each other. Did they tell you that? 6 7 No. 8 Q All right. Let's take a look at it. This is 9 from the transcript of the proceedings of September 28th 1998, transcript of the proceedings in this case, 10 the opening statement of the plaintiff. Which counsel 11 12 for the plaintiff says, I want to make something very 13 clear to you, it said to the members of this jury, it is the State's evidence that the conspiracy you are 14 going to hear about was limited to essentially one 15 area between them, they were joined at the hip in only 16 17 one area, that area dealing with health claims and 18 health issues, otherwise they were in competition with 19 each other. 20 I don't want you to think that our evidence 21 will be that in all respects they didn't compete, 22 because they did. 23 Do you see that? 24 I see that. Α 25 Now, let's turn back to the question of these 03898 1 Latin American countries. Before you gave your opinion to the men and women of this jury about what 2 those documents meant and what the excerpts were shown 3 4 to you from those documents meant, did you, Professor, study the economic markets and conditions in those 5 6 countries at the time those documents were written? 7 Any and all economic markets and conditions 8 in those countries? 9 Anything about the economic conditions or 10 markets in those countries? A Not as a general matter, no. I haven't done 11 12 a study of the economy of any one of those countries. 13 I am somewhat familiar with Venezuela, because I have been there a couple of times and given talks there. 14 15 The economics department at the central bank, to the antitrust authority of Venezuela. But aside from that 16 17 I have not done detailed studies of those countries. 18 Detailed or otherwise, isn't it true, Doctor, that you did no study of the economic markets or 19 economic conditions, including the market for tobacco 20 21 in those countries during the periods in question? 22 Α More or less that is an accurate assessment, 23 yes. 24 And you did no study before giving your 25 opinion to the members of this jury that those 03899 1 documents showed price fixing, you did no study of 2 pricing of cigarettes or other products in those Latin 3 American markets, did you, sir? 4 Α No.

5 In fact, the only thing you did before reaching your opinion, which you conveyed to this jury 6 7 last Tuesday morning, the only thing you did on this 8 area of Latin America, was to look at the company documents that the plaintiff's lawyers furnished you, 9 10 Yes. And the documents speak for themselves. 11 12 Well, I think I agree with you on that. I 13 want to take a look at the documents and see exactly 14 what they do say. But let me ask you this. You did 15 at least read the whole document, right? I tried to, yes. I read through a lot of 16 17 documents and I have tried to read everything in the 18 documents. 19 Q You didn't just read the excerpts that the 20 plaintiff's counsel displayed to the jury? 21 No. 22 Well, let's turn to some of those. Because if you read all the documents I take it you are 23 24 comfortable that the excerpts that were shown to the men and women of the jury during your testimony, you 25 03900 are comfortable that that told the whole story to this 1 2 jury about what was going on between these companies 3 down in --4 No. I think there are lots of things 5 potentially going on between those companies. But that certainly tells a part of the story of what is 6 7 going on between those companies. 8 Let's look at some of the rest of the story. 9 Let me start by showing you a document, State's Exhibit WA, for Washington, 6131, which is a document 10 11 we -- we will establish the date on it in a minute. It is one of the documents involving Latin America 12 that the State offered into evidence in connection 13 with your testimony here. I will see if I can focus 14 15 this for just a minute. 16 And Professor, do you remember -- this is 17 titled Notes on Decisions/Strategies. It relates to a 18 company called Bigott, B-i-g-o-t-t. 19 Do you see that? Α 20 Yes. 21 And to something that you testified about 22 called a market share agreement. 23 Do you see that, sir? 24 Yes. Α 25 And you recall that Bigott is a cigarette 03901 1 company, a subsidiary of my client, the British American Tobacco Company, that sells cigarettes in the 3 country of Venezuela? 4 I believe that is correct, yes. 5 We can take a look at the page Bates number 6 ending 143 -- I'm sorry, 142. And it shows that this 7 is a document from the Venezuela company for the 8 period November/December 1989. 9 Do you see that? 10 It says from Venezuela for the period 11 November/December 1989. 12 So this tells us we are in the country of 13 Venezuela, and it tells us what time period we are 14 talking about? 15 Α Yes.

```
It also -- the market share agreement, this
16
17
      is one of the things you pointed to and testified to
18
      the jury last week as a collusive agreement. This
19
      document shows that this market share agreement, that
      they were talking about was between Bigott, a tobacco
20
21
      company owned by British American Tobacco Company, and
      a company called Catana, another cigarette company
22
23
      which I believe you testified is affiliated with the
24
      Philip Morris Company?
25
              I believe so, that's right.
03902
              All right. Now, let's just take a look at
1
      what the rest of this document tells us.
2
              Now, Doctor, having read all these documents,
3
 4
      are you aware generally of what the situation was back
5
      in this 1989 period, and in fact all through the late
      '80s and into the early 90s with respect to inflation
 6
7
      in Venezuela and other Latin American countries?
8
             Not entirely, but to some extent.
9
              Let's just take a look. Is it going to
      surprise you that by looking at these documents we
10
11
      find out that during this period of time these
      countries were going through what economists sometimes
12
13
      refer to as hyperinflation?
14
               I would have to look and see. I haven't
15
      studied the monetary policy -- the monetary results in
16
      those countries. I am aware that inflation --
     hyperinflationary episodes occur in those countries
17
18
      sometimes, yes.
19
       Q Would you tell the jury what hyperinflation
20
      refers to?
21
             Hyperinflation is a very high rate of
       A
22
23
             A rate of inflation beyond anyone's
      experience who has lived their life in the United
24
25
      States?
03903
1
               I don't know that the United States has ever
     been through a period of hyperinflation. So by
2
3
      American standards -- Israel has gone through, Germany
      in the '30s went through one, Latin American countries
 4
 5
      go through them from time to time.
 6
       Q To just give us a benchmark so we can get
 7
      some comparisons here, Professor, what is the annual
8
      rate of inflation like on a December to December basis
9
      right now in the United States?
10
              Let me preface this by saying I am not a
11
      macroeconomist, so I don't know follow the
12
      macroeconomic data particularly. But I will tell you
13
      it is on the order of two percent, three percent, say.
14
            I am going to say two to three percent. Now,
15
      let's just take a look and see what was going on here
16
      in Venezuela back at the time of this document.
17
               Does this show us -- this, again is State's
18
      Exhibit 6131 at page 128. This has some information
19
      here about pricing. Do you see them, Doctor? Can you
20
      read that?
              Yes, vaguely. Yeah, a little bit.
21
22
              Now, this refers to a price increase, showing
23
      the price of a series of brands of cigarettes. Do you
      know what the monetary unit is in the country of
24
25
      Venezuela?
03904
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1 Α Yes. The bolivar? 2. Q 3 Α It is also called the bolivar, the B for 4 short. 5 The B. It shows that it moved from February 6 of '89 to May of '89, let's call that a four month period, from 18 bolivars, to 23 bolivars, which 7 8 somebody has written 55 percent increase? 9 Α Yes. 10 Which sounds like a really big increase? 11 Α 12 It goes on to say the price increase was slightly ahead of inflation of forty-five percent 13 14 since February. 15 Do you see that? 16 Α Yeah. 17 Now, if Venezuela had forty-five percent 0 18 inflation in the four months -- February, March, April 19 and May, four months of the year, just to annualize 20 that, and I realize it varies from month to month, but to annualize that, Professor, that would be a rate of 21 22 inflation of about one hundred and thirty-five percent 23 for a year, true? 2.4 I would have to do the calculations. I don't Α 25 think you can just -- something very high, yes. 03905 1 Now, Professor, when a country gets itself in 2 a situation of dealing in this hyperinflationary type of situation, isn't it true that one of the things 3 4 that happens is the government gets involved in the 5 pricing of products? 6 That's certainly possible, yes. 7 Let's just take a look and see what this document tells us about that, about what was going on 8 with the pricing of products during this 9 hyperinflationary period. And I am referring now to 10 11 the page that is Bates number 166. And to this 12 section that says pricing excise and import duties. 13 It says here, there is no official price 14 control in Venezuela. Price increases are normally agreed on an industry basis subject to economic 15 justification and sixty days notice to the Venezuelan 16 17 commission on cost, price and wages. 18 Do you see that, sir? 19 Α Yes. 20 Until 1989 there have been two price increases, in February and May, which increased the 21 price of a packet of twenty -- that presumably refers 22 23 to a packet of cigarettes, correct? 24 Α Yes. 25 -- by 4 and 9 bolivars respectively to 16 and 03906 1 25 bolivars. Do you see that? 2 Yes. 3 Now, Professor, even though you didn't take 4 the time to study what was going on in these 5 economies, it is not unusual in these situations, 6 these situations where foreign countries are dealing 7 in these hyperinflationary situations, where the 8 companies in order to get a price increase are 9 required to come forward, as this document says, on an 10 industry basis to a government agency and apply for 11 the right to raise their prices.

Are you aware of that? 12 13 I am aware of price controls and situations Α 14 in which there are price controls the government has 15 to approve price increases, yes. 16 That is a situation that is pretty foreign to 17 our culture and our economy, and the way we live and the way the economy works in this country? 18 19 As a general matter, we believe that prices 20 should be determined by competition. And in other 21 countries, often there is much more involvement -- not 22 all countries, but in many countries there is more 23 involvement by the government in price controls, yes. 24 Let's turn to this market share agreement 25 that we talked about. And you testified last week, 03907 1 last Tuesday morning, to be exact, that in connection with a Latin American country the market share 2 agreement referred to an agreement whereby two 3 companies have -- I think the example you used was for 4 5 one, 49.8 percent, somebody else has got some other percent of the market. And they get together and 6 7 agree to run their businesses so that they don't take each other's market share away from each other? 8 9 That's the way a market share agreement would 10 work. If one of them starts to encroach on the other 11 one's market that they would adjust somehow, yes. 12 And you told this jury that that was 13 consistent with collusion between these companies, 14 right? 15 It is certainly consistent with collusion, 16 ves. 17 Let's take a look at what this document says 18 about this market share agreement. I will go back to that same page, which is Bates number ending 166, 19 which talks about how this market share agreement came 20 21 about. Market share agreement. By intensive lobbying 22 in political circles, even the president of Venezuela 23 brought pressure to bear on Bigott, and by refusing to 24 increase products, Catana, the Philip Morris company, 25 right, Catana was able to force people, the British 03908 American company, to accept a market share in 1984. 1 Since Bigott only partially complied with this 2 3 agreement, it was renegotiated in 1986. Bigott 4 complied with the agreement between June of 1986 and 5 1987. But in view of the serious impact on the market, which was being under supplied, we show, my 6 7 client's company -- we show allowed volume to increase 8 thereafter. 9 In 1988, once again the competition through 10 political pressure, and by withholding its support for 11 price increases forced renegotiation of the agreement. 12 Do you see that language, Doctor? 13 Α Yes. 14 Now, let me go back. So when this whole 15 thing started, this market share agreement that you testified was collusive, began with the president of 16 17 Venezuela's coming to my client and saying I want you to enter into a market share agreement with this other 18 19 country. 20 Do you see that, Doctor? 21 MR. FERGUSON: Objection. The document 22 doesn't say that.

```
23
               THE COURT: Please rephrase.
   BY MR. McCORMICK:
24
25
              Doctor, let me ask you this. This picture
03909
      that is painted here is something that is completely
1
      unheard of in the culture that we live in and the
2
      economy that we live in and the market system that we
 3
 4
      live in in this United States, isn't it, sir?
 5
               I'm not sure I would go that far. It is
 6
      somewhat different. It is certainly more open
 7
      involvement of the political process in setting up
      prices, I will grant you that.
8
9
              We can't sit here in King County and just say
10
      we are going to apply -- move ourselves down to
11
      Venezuela mentally without understanding all the
12
      ramifications of what was going on there to try to
13
      assess these situations, can we, sir?
              I think the -- I don't think that economic
14
15
      theory changes when you go to Venezuela. I think that
16
      the political institutions do change. I think that is
17
      a fair way to put it.
18
              Let's just say -- use an example and let's
19
      just try to take an example out of this document. You
20
      understand about a year or so ago that Boeing acquired
21
      McDonnell Douglas Corporation?
22
              Yes, I am aware of that.
23
              Let's go back a few years in time to the
      point where Boeing and McDonnell Douglas were fighting
24
25
      for share in competitive markets?
03910
               I wouldn't characterize it as a competitive
1
 2
      market. It was an oligopoly.
 3
               Whatever it was, they were battling it out
      for orders from the major airlines and everybody knew
 4
      that somebody wasn't going to stay in business, right?
 5
               They were both trying to sell airplanes. I
 6
 7
      will go that far.
 8
               And if McDonnell Douglas five years ago,
9
      let's say, had come to Boeing and said we want to have
10
      a market share agreement, you have X percent, let's
11
      just run our business so we don't take each other's
12
      business, that would be completely unheard of in our
13
      environment and completely contrary to the principles
14
      under which our economy operates?
15
              MR. FERGUSON: Objection, relevance.
16
      Possibly calling for a legal conclusion.
17
               THE COURT: Overruled.
18
               THE WITNESS: What I would say, as a matter
19
      of economics, that would not necessarily be
20
      implausible, rival companies in an oligopoly often
21
      come together and say let's cooperate, let's not
22
      compete with each other. That's the nature of
23
      collusion. That's what collusion is all about.
24
               In all likelihood it would be illegal under
25
      the antitrust laws. But I am not going to offer a
03911
      legal conclusion. I know enough about the antitrust
 1
      laws to believe if they were to do that, and the word
 2
 3
      were to get out, and it would get to the justice
 4
      department that there would be a legal problem.
 5
              They would be prosecuted and sent to jail for
 6
      doing that?
              They could well, yes.
 7
```

```
8
               In our culture?
         Q
 9
               They could well, yes.
         Α
10
               And it would be inconceivable that if
11
      McDonnell Douglas went to Boeing and said, look,
      before we drive one or the other out of business,
12
13
      let's make a deal, and Boeing said, no, it would be
      inconceivable for McDonnell Douglas to go to the
14
15
      president of the United States and say, I want you to
16
      go to Boeing and see if you can't persuade them to
17
      enter into a market share agreement.
18
               You cannot imagine that in this country?
19
               I think that is very unlikely, yes.
20
               Let's turn to another document --
               THE COURT: Before you do that, it is 4:00.
21
22
      We will take a break. We will see you at 9:00.
23
               (Jury not present.)
24
               THE COURT: Please sit down.
               MR. McCORMICK: Two things, your Honor.
25
03912
1
      First of all, with respect to Professor Donaldson,
      both the issues I have relate to Professor Donaldson.
 2
               First of all, with relation to Professor
 3
      Donaldson's testimony, at the break we were given a
 4
 5
      proposal, And I don't know if this was passed up to
 6
      the Court. Okay. We were given a proposal that
 7
      provides for an allocation of time for Professor
 8
      Donaldson's testimony on Tuesday, which I think is
 9
      tomorrow, Wednesday and Thursday. Okay.
               So as an initial proposition the speech which
10
11
      couldn't be moved has evidently been moved. I gather
12
      from this that Professor Donaldson would be available
      on Thursday.
13
14
               MR. LUVERA: We are trying to make a
      proposal, your Honor. I don't think the
15
      cross-examination from Mr. McCormick is appropriate.
16
17
      We are trying to explore cooperative ways.
               MR. McCORMICK: I don't mean to
18
      cross-examine, your Honor. I am in sort of that mode.
19
20
      In any event, the bottom line it seems evident from
21
      this, that it would be possible, at least under some
      circumstances, for Professor Donaldson to be
22
23
      available. The proposal is for the plaintiffs to have
      eight hours of direct and redirect examination, for
24
25
      the defense to have five and a half hours. I can go
03913
1
      into the details why, I think, it is obvious on its
2
      face, this is not acceptable to us. Let me explain
 3
      it. You are looking at me like you want me to explain
 4
 5
               THE COURT: I am just here listening.
               MR. McCORMICK: I will try not to belabor
 6
 7
      this. Your Honor, this is not agreeable to us. The
 8
      fact of the matter is, as Professor Donaldson is going
9
      to proceed we are confident, as everyone has proceeded
10
      in this case, you can take four minutes or five
11
      minutes on direct examination to throw something
      against the wall, we refer to them at the defense
12
13
      counsel table as drive-by shootings, free-based
      nicotine, it takes three minutes to throw that against
14
15
      the wall and it may take a half hour to forty-five
16
      minutes to scrape it off. Tobacco companies lie,
17
      executive lies about addictions takes fifty-six
18
      seconds, the explanation of how that debate started
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all the way back in 1964, what happened at that
hearing, that sound bite, what happened after that
sound bite doesn't take fifty-six seconds, it may take
a half hour, forty-five minutes. And the idea that we
would be bound by Court rule to parity, much less -less than parity really doesn't make sense in the way
this case is being tried. And we would object to the
osense

allocation that they proposed.

More importantly, your Honor, we don't understand why there needs to be an allocation at this point. As I say, it appears from this that it is at least possible for Professor Donaldson to be here on Thursday.

MR. LUVERA: Your Honor, the situation is, as described by Mr. Berman, and that is that the witness will literally lose his position at the university if he is not there by Monday. Since your Honor has indicated that you do not wish interruptions, we are trying to find a compromise to the solution. I understood your Honor to suggest it might be worth exploring an allocation of time as a solution. And that if we could arrange to have the speech put off that Thursday might be available, and that would be a logical way to proceed.

Before any commitment to is made to put off the speech, which I think can be made at some great sacrifice, I offered a proposal on allocation of time. Now, that's the status.

This is the first response I have heard since I gave it to them at the recess. I think I am hearing counsel say that it is his belief that what should occur procedurally is that the direct examination

should be considerably shorter than the cross-examination, a statement which I find quite surprising. The plaintiff having the burden of proof generally produces evidence. And traditionally the cross-examination has been considerably shorter, in my experience in trying cases, the cross-examination has been considerably shorter than the direct examination for that very reason.

For example, the qualifications of the witness will take some time, the establishment of the field that he works in will take some time. To do this will require, as I'm sure you might imagine, some cutting back of a number of documents we intended to review with him to see what his opinions were within the field he is talking about.

I for one do not believe that the allocation is unreasonable if we are going to have an allocation of time. And frankly we thought about it at our table. We don't know of any other solution, given the witness's situation and our inability to designate somebody else, unless we simply recess the trial early this week without calling anybody and trying to reschedule him at a later time, which doesn't make a lot of sense to us.

25 So I guess in summary we are trying offer and 03916

- 1 compromise. We think it is a reasonable compromise.
- 2 And we are very willing to hear your Honor's views on
- 3 it.

THE COURT: The question in my mind, if he 4 5 would at least potentially be available on Thursday, is also whether he would also potentially be available 6 7 on Friday for a limited session. 8 MR. LUVERA: Yes, he would be, your Honor. 9 I did not use Friday because I didn't know if that was available, given your remarks. 10 THE COURT: I expect Judge Armstrong to be 11 here Friday morning. But, reluctantly, I could be in 12 13 session Friday afternoon, although I would have to ask 14 the jurors, and you collectively, about availability. 15 Let me hear more from the defendants on that issue, if you have anything to say. 16 17 MR. McCORMICK: Well, we don't have a problem with going on Friday if it is necessary to get 18 19 Professor Donaldson finished this week. THE COURT: I don't know whose notes these 20 21 22 MR. LUVERA: Those are mine. 23 THE COURT: One thing about the time. It actually works out evenly, but the time allocation 24 doesn't include the recess, morning and afternoon. 25 03917 MR. LUVERA: No, sir. 1 2 THE COURT: So on both ends of the time 3 allocation there would be a bit less. I think it totals in the proposal 7.25 for plaintiff and 5 for 4 defendant. It doesn't change the principle here. 5 would like to see when this witness, that is Dr. 6 7 Solow's testimony actually concludes, and exactly how 8 many hours we have. And then I am prepared to hear 9 more briefly, if anyone wants to say anything. 10 It looks to me as if there is enough time, particularly if we have the safety valve on Friday, to 11 have an even-handed allocation of the time available. 12 And I'm not going to make a ruling on what that would 13 14 be, but it appears to me that there would be an 15 adequate opportunity for direct and cross, maybe 16 constrained. 17 But let's see what the totals are and hear 18 anything else you want me to hear very briefly, and 19 then I will give you a ruling. Do the defendants have any better sense at this point -- I am not going to 20 21 hold it to you precisely -- about how much more cross 22 we have collectively. 2.3 MR. McCORMICK: I had really hoped to finish today. And I would hope to take no more than a half 24 25 hour in the morning. There are a couple of other 03918 crosses. I think collectively our goal would be to 1 2 finish by the mid morning break. 3 MR. SCHIFFERMAN: It wouldn't be that fast. 4 MR. McCORMICK: By noontime anyway, your 5 Honor. 6 THE COURT: Okay. Unless there is anything 7 else anyone wants to say on that subject or another we 8 will let you go --9 MR. McCORMICK: Your Honor, there is one other issue I would like to raise. And it is an 10 11 evidentiary issue relating to Professor Donaldson's 12 testimony. I know your Honor has under consideration 13 the documents that were submitted by the plaintiff for 14 Professor Donaldson and our objections. I would

```
appreciate if I could have five minutes to be heard in
15
16
      aid of our objections on that.
17
               THE COURT: What I have got is an emergency
18
      meeting, an executive meeting five minutes from now.
               MR. McCORMICK: Could we do this, could we
19
20
      have some time when the jury is not waiting for us, or
21
      at the Court's convenience some time before Dr.
      Donaldson goes on? We would -- we would like an
22
23
      opportunity to be heard in aid of that objection.
24
              MR. LUVERA: Your Honor, we haven't done that
      up until now. And I would prefer your Honor's rulings
25
03919
     in advance. And then if counsel wants to indicate
1
 2
      which of those he would like to talk about, I would
 3
      feel a lot more comfortable than having him stand up
 4
      and talk about documents. I don't know what he is
     going to talk about. We are going to have to respond.
 5
     The witness is going to have to wait. There will be
 6
 7
     time involved. I would very much urge that the Court
8
     make its rulings, and then if counsel wants to be
9
      heard on them your Honor can hear them.
               THE COURT: Do you have a couple of specific
10
11
     documents in mind? We are not going to do it right
12
     now.
13
               MR. McCORMICK: I have one document in mind,
14
     your Honor.
15
               THE COURT: Will you tell the plaintiffs what
     that document is? I take it literally you are talking
16
      about a few minutes on it. Plaintiffs will have a
17
18
      chance to look at that document and prepare to argue
19
      it in the morning, we will do that.
               MR. LUVERA: I never got the number.
20
               THE COURT: You will get it. I have asked
21
      the defendants to give you that number so you will be
22
      prepared to argue it in the morning.
23
24
               (Evening recess.)
03920
1
     STATE OF WASHINGTON
 2
                                    )
 3
     COUNTY OF KING
 4
 5
 6
 7
                We, James D. Lavielle, RPR, CSR, Barry Fanning,
 8
     RPR, Official Court Reporters for the Superior Court,
9
     State of Washington, hereby certify that the foregoing
10
     comprises a full, true and correct transcription of my
11
     stenographic notes taken in the above-entitled cause.
12
13
14
                   Dated this 26th day of October, 1998.
15
16
                                OFFICIAL COURT REPORTER
17
18
19
                           James D. Lavielle, RPR, CSR
20
21
                           Barry Fanning, RPR, CSR
22
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